

VAIO

PCG-Z505R/Z505RX (UC)

PCG-Z505R/Z505RX (UC)

9-928-344-11

99J1605-1

SONY

PCG-Z505R/Z505RX

SERVICE MANUAL

US Model
Canadian Model

Basic performances of PCG-Z505R and those of PCG-Z505RX are the same as those of PCG-Z505S/Z505SX. Therefore, this manual describes the differences from PCG-Z505S/Z505SX and CHAPTER5. EXPLODED VIEW AND PARTS LIST. The User Guide for this model is also included for your reference. Refer to the PCG-Z505S/Z505SX SERVICE MANUAL (9-928-321-11) that is already issued for repair and inspection.

MAJOR DIFFERENCES

Items		PCG-Z505S/Z505SX	PCG-Z505R	PCG-Z505RX
Specifications	CPU	Mobile Pentium® II 366MHz (PCG-Z505SX)	Mobile Pentium® II 366MHz	Mobile Pentium® II 400MHz
		Mobile Celeron™ 333MHz (PCG-Z505S)		
	HDD	6.4GB	6.4GB	8.1GB
	BOARD	MBX-20	MBX-31	
		IFX-65	IFX-87	
		SWX-31	SWX-42	
		SWX-34	SWX-43	
		LEX-17	LEX-19	

1-1. VAIO Z505 SuperSlim Pro™ Notebook User Guide

SONY®

**VAIO® Z505 SuperSlim Pro™
Notebook User Guide**

PCG-Z505R/PCG-Z505RX



Notice to Users

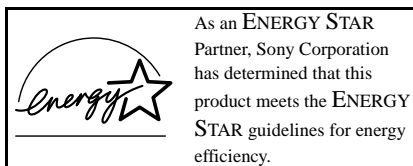
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Owner's Record

The model number and serial number are located on the bottom of your Sony VAIO® Z505 SuperSlim Pro™ notebook. Record the serial number in the space provided here. Refer to the model and serial number when you call your Sony Service Center.

Model Number: PCG-Z505R/PCG-Z505RX

Serial Number: _____

Safety Information

WARNING

- ☐ To prevent fire or shock hazard, do not expose your notebook computer to rain or moisture.
- ☐ To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
- ☐ Never install modem or telephone wiring during a lightning storm.
- ☐ Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- ☐ Never touch uninsulated telephone wire or terminals unless the telephone line has been disconnected at the network interface.
- ☐ Use caution when installing or modifying telephone lines.
- ☐ Avoid using the modem during an electrical storm.
- ☐ Do not use the modem or a telephone to report a gas leak in the vicinity of the leak.
- ☐ A socket outlet should be as close as possible to the unit and easily accessible.

! For CD-ROM: The use of optical instruments with the CD-ROM drive will increase eye hazard.

! For DVD-ROM: As the laser beam used in the DVD-ROM drive is harmful to the eyes, do not attempt to disassemble the drive cabinet. Refer servicing to qualified personnel only.

AVERTISSEMENT

- ☐ Pour prévenir tout risque d'incendie ou d'électrocution, garder cet appareil à l'abri de la pluie et de l'humidité.
- ☐ Pour prévenir tout risque d'électrocution, ne pas ouvrir le châssis de cet appareil et ne confier son entretien qu'à une personne qualifiée.
- ☐ L'appareil doit être le plus près possible d'une prise murale pour en faciliter l'accès.

Regulatory Information.

Declaration of Conformity

Trade Name: SONY

Model No: PCG-Z505R/PCG-Z505RX

Responsible Party:
Sony Electronics Inc.

Address:
1 Sony Drive
Park Ridge, NJ 07656

Telephone No.: 201-930-6970

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ❑ Reorient or relocate the receiving antenna.
- ❑ Increase the separation between the equipment and the receiver.
- ❑ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ❑ Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Only peripherals (computer input/output devices, terminals, printers, etc.) that comply with FCC Class B limits may be attached to this computer product. Operation with non-compliant peripherals is likely to result in interference to radio and television reception.

All cables used to connect peripherals must be shielded and grounded. Operation with cables, connected to peripherals, that are not shielded and grounded, may result in interference to radio and television reception.

FCC Part 68

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This modem uses the USOC RJ-11 telephone jack.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If the terminal equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operations of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact 1-888-4SONYPC (1-888-476-6972), or write to the Sony Customer Information Center, One Sony Drive, Park Ridge, NJ 07656 for repair and/or warranty information. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

Repair of this equipment should be made only by a Sony Service Center or Sony authorized agent. For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972).

This equipment cannot be used on public coin service provided by the telephone company. Connection to Party Line Service is subject to state and possible provincial tariffs. (Contact the state or provincial utility service commission, public service commission, or corporation commission for information.)

Telephone Consumer Protection Act of 1991 (United States)

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual.

In order to program this information into your facsimile machine, see your fax software documentation.

Telephone Consumer Guidelines (Canada)

Please refer to your telephone directory under 'Privacy Issues' and/or 'Terms of Service.' For more detailed information, please contact:

CRTC

Terrasses de la Chaudière, Tour centrale
1 promenade du Portage, 5 étage Hull PQ
K1A 0N2.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

DISPOSAL OF LITHIUM ION BATTERY

You can return your unwanted lithium ion batteries to your nearest Sony Service Center or Factory Service Center.



In some areas the disposal of lithium ion batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you call 1-888-476-6972 in the United States or 1-800-961-7669 in Canada.

! Do not handle damaged or leaking lithium ion batteries.

! Ne pas manipuler les batteries au lithium-ion qui fuient ou sont endommagées.

! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

! Une batterie non conforme présente un danger d'explosion. La remplacer seulement par une batterie identique ou de type équivalent recommandé par le fabricant. Évacuer les batteries usées selon les directives du fabricant.

! The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 212°F (100°C) or incinerate. Dispose of used battery promptly. Keep away from children.

! La manutention incorrecte du module de batterie de cet appareil présente un risque d'incendie ou de brûlures chimiques. Ne pas démonter, incinérer ou exposer à une température de plus de 100°C. Évacuer promptement la batterie usée. Garder hors de portée des enfants.

INDUSTRY CANADA NOTICE

NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the

equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection.

The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Equipment malfunctions or any repairs or alterations made by the user to this equipment may give the telecommunications company cause to request that the user disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5. The Ringer Equivalence Number for this equipment is 0.4.

AVIS DE L'INDUSTRIE CANADA

AVIS: L'étiquette d'Industrie Canada identifie le matériel homologué.

Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

AVIS: L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface.

La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

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Welcome

Congratulations on your purchase of the Sony VAIO® Z505 SuperSlim Pro Notebook. Sony has combined leading-edge technology in audio, video computing and communications to provide you with state-of-the-art personal computing.

Features



For a complete description of the specifications of your VAIO Z505 SuperSlim Pro Notebook, see page 80

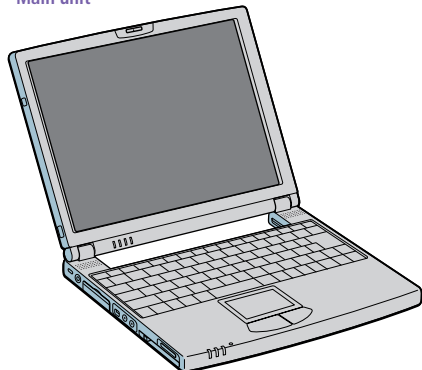
- ❑ **Exceptional performance:** Your notebook includes a fast Intel® Pentium® II processor and a V.90 compatible modem.*
- ❑ **Portability:** The high-capacity lithium-ion battery provides hours of use without AC power.
- ❑ **Sony audio and video quality:** High-quality MPEG1 video, which supports full-screen display (12.1-inch Active Matrix LCD screen) and enables you to take advantage of today's advanced multimedia applications, games, and entertainment software.
- ❑ **Windows® 98 Second Edition:** Your system includes the latest operating system from Microsoft.
- ❑ **Communications:** Access popular online services, send e-mail, browse the Internet, and use fax features.

* Actual upload and download speeds may vary due to line conditions, ISP support, and government regulations.

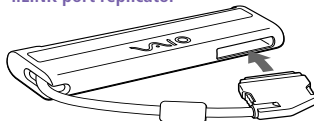
Unpacking Your Notebook Computer

Remove the following hardware items from the box:

Main unit



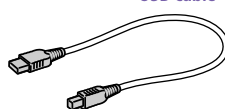
i.LINK port replicator



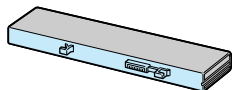
RJ-45 network cable adapter



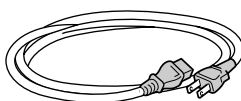
USB cable



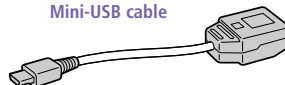
Rechargeable battery pack



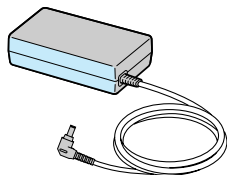
Power cord



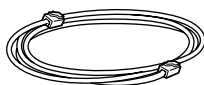
Mini-USB cable



AC adapter



Phone cable



USB floppy disk drive



Manuals

- ❑ The VAIO[®] Z505 SuperSlim Pro[™] Notebook User Guide (this manual) contains information on how to get the most from your computer, find help, and solve common problems. It also includes product specifications.
- ❑ *Read Me First* contains Frequently Asked Questions, the most up-to-date information on using your computer, and software support information.
- ❑ The VAIO[®] Consumer Information Guide contains ergonomic considerations and your computer's limited warranty statement.
- ❑ The Microsoft[®] Windows[®] 98 Second Edition *Getting Started* manual explains how to use the basic features of the Windows operating system.

Software CDs

Microsoft® Works Suite CDs

Recovery CDs

- ❑ System Recovery CD(s)
- ❑ Application Recovery CD(s)



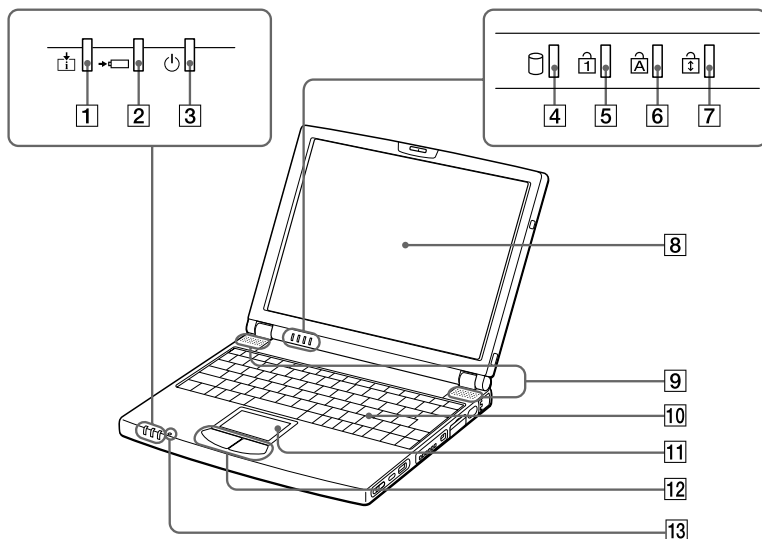
To use these recovery CDs, you need to purchase the PCGA-CD5 or PCGA-CD51 CD-ROM drive.

Other

- ❑ Setting up your VAIO® Z505 SuperSlim Pro™ Notebook (poster)
- ❑ Packet containing special product offers

Locating Controls and Connectors

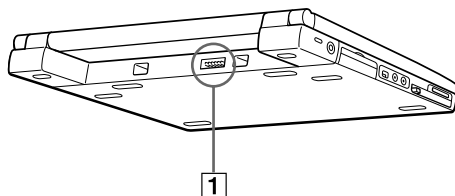
Front



- 1** Information indicator (page 18)
- 2** Battery indicator (pages 9, 18)
- 3** Power indicator (pages 11, 18)
- 4** Hard disk drive indicator (page 18)
- 5** Num Lock indicator (page 18)
- 6** Caps Lock indicator (page 18)
- 7** Scroll Lock indicator (page 18)

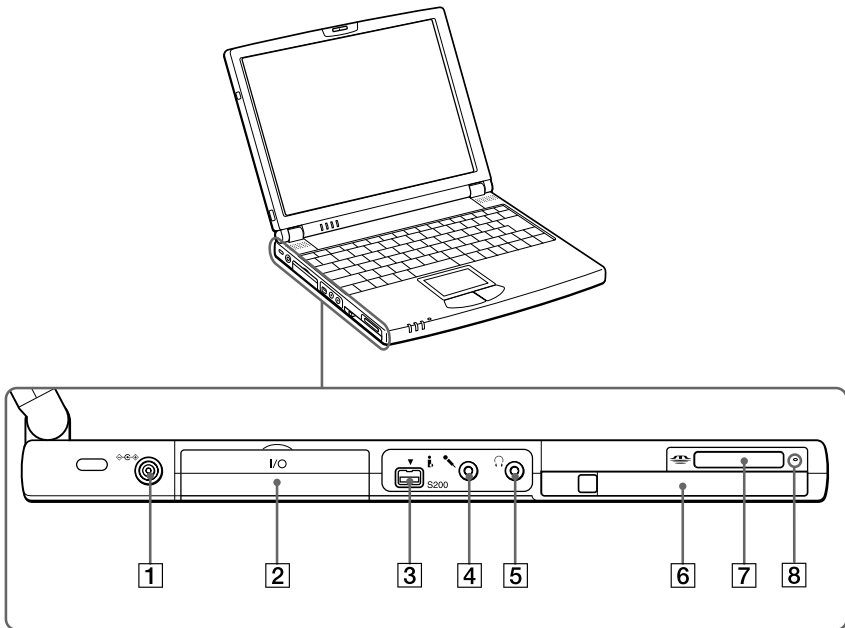
- 8** LCD screen (pages 19, 71)
- 9** Speaker (pages 19, 63)
- 10** Keyboard (page 15)
- 11** Touchpad (page 21)
- 12** Left/right button (page 21)
- 13** Microphone

Back



- 1** Battery connector (page 8)

Left



1 DC In connector (page 7)

2 I/O i.LINK® port replicator connector (page 39)

3 S200 i.LINK (IEEE-1394) (page 49)

4 Microphone connector

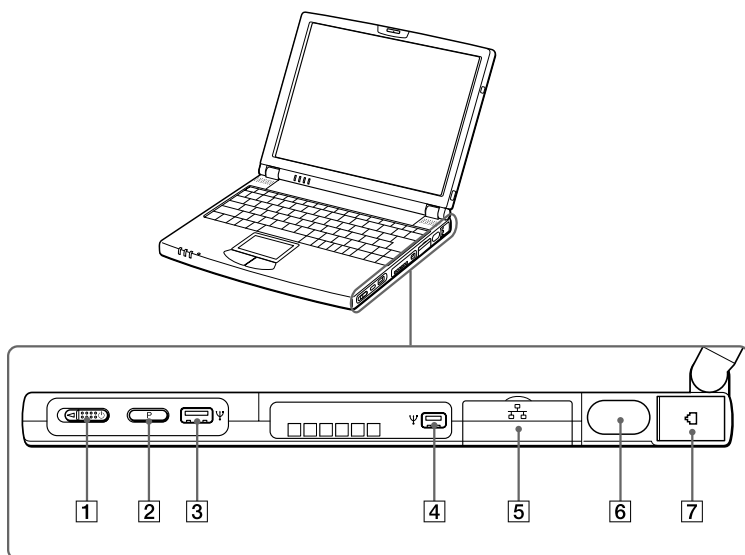
5 Headphone connector (page 43)




6 PC card slot (page 28)

7 Memory Stick™ card slot (page 25)

8 Memory Stick™ indicator light

Right

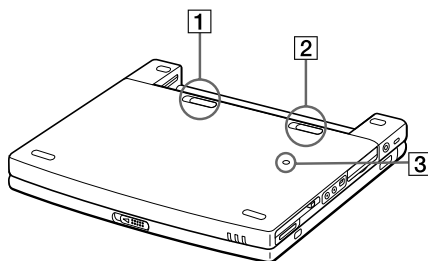


- | | |
|---|---|
| 1 Power switch (page 11) | 5  Ethernet network connector |
| 2 Programmable Power Key (see the online document <i>Customizing Your VAIO® Z505 SuperSlim Pro™</i> Notebook) | 6 Infrared port (page 32) |
| 3  USB connector (page 51) | 7 Phone line jack (page 37) |
| 4  mini USB connector (page 51) | |



The USB connector is disabled when the port replicator is connected.

Bottom



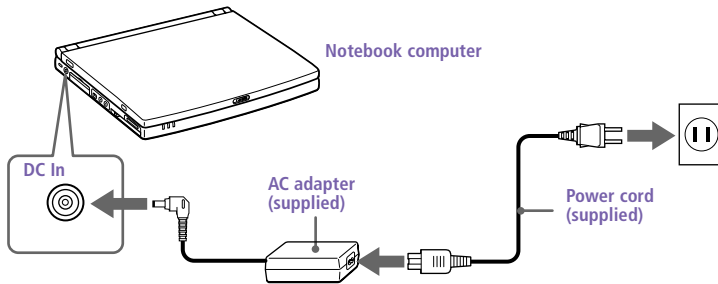
- | | |
|---|-----------------------|
| 1 Battery release lever (page 10) | 3 Reset switch |
| 2 Battery lock lever (pages 8, 10) | |

Connecting a Power Source

You can use either AC power or a rechargeable battery pack as a power source.


Using the AC Adapter

- 1 Plug the cable attached to the AC adapter into the DC In connector on the computer.
- 2 Plug one end of the power cord into the AC adapter.
- 3 Plug the other end of the power cord into an AC outlet.



Using Battery Power

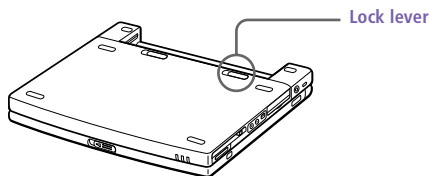
You can use a battery pack as a source of power. The PCGA-BPZ51 battery pack that comes with your computer is not fully charged at the time of purchase. Follow the steps below to insert and charge the battery pack.

 You can also purchase the high-capacity PCGA-BPZ52 battery pack as a separate option.
See "Using Power Saving Modes" on page 34 for power management information.

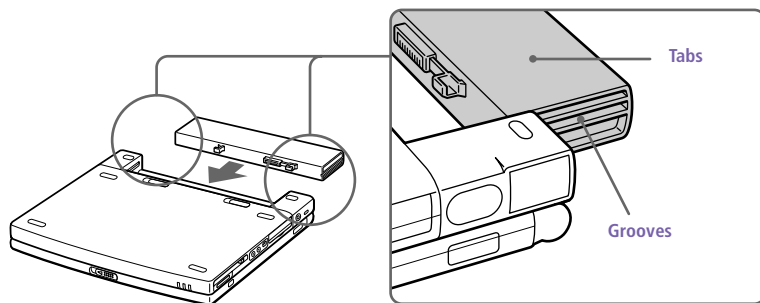
To insert the battery pack

You can insert or remove the battery pack without turning off the computer when your computer is connected to the AC adapter. Before inserting or removing a battery pack, close the cover.

- 1 Move the lock lever on the bottom of the computer to the **UNLOCK** position.



- 2 Align the grooves and tabs on the battery with the tabs and notches on the back of the computer, and then slide the battery toward the computer until it clicks into place.




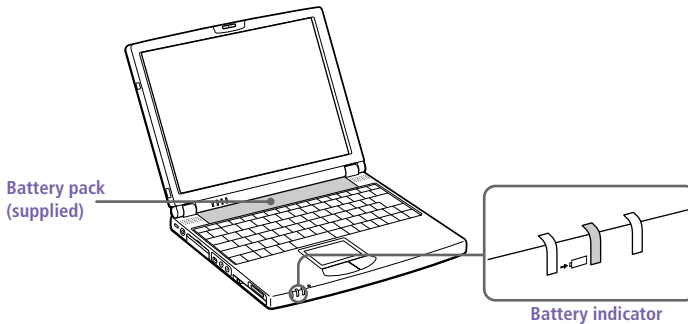
- 3 Slide the lock lever into the **LOCK** position to secure the battery on the computer.

To charge the battery pack

- 1 Connect the AC adapter to the computer.
- 2 Insert the battery pack.

The computer automatically charges the battery (the battery indicator light flashes in a double blink pattern as the battery charges). When the battery is 85% full, the battery indicator light turns off. This process takes approximately one and one half hours. To charge the battery completely, continue charging for an additional hour.

The  battery indicator light on the front of the computer indicates the status of the battery pack.



Battery Indicator Light Status

Meaning

On	The computer is using battery power.
Single blink	The battery is running out of power.
Double blink	The battery is charging.
Off	The computer is using AC power.



Both the battery and power indicators blink when the battery is running out of power.

Keep the battery pack in the computer while it is directly connected to AC power. The battery pack continues to charge while you are using the computer.

If your battery level falls to less than 10 percent, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

You can extend battery life by changing the power management modes in the PowerPanel utility. See "Using Power Saving Modes" on page 34.

The battery pack supplied with your computer is a lithium ion battery and can be recharged at any time. Charging a partially discharged battery does not affect battery life.

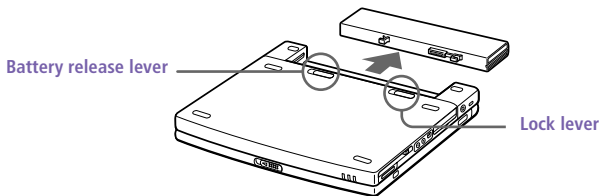
The battery indicator light is on while you use the battery pack as a power source. When battery life is nearly depleted, the battery indicator starts flashing.

For some software applications and some peripheral devices, your computer may not enter System Hibernation mode when the battery life is low. To avoid loss of data when using battery power, you should save your data frequently and manually activate a power management mode, such as System Suspend or System Hibernation.

To remove the battery pack

You can insert or remove the battery pack without turning off the computer when your computer is connected to the AC adapter. Before inserting or removing a battery pack, close the cover.

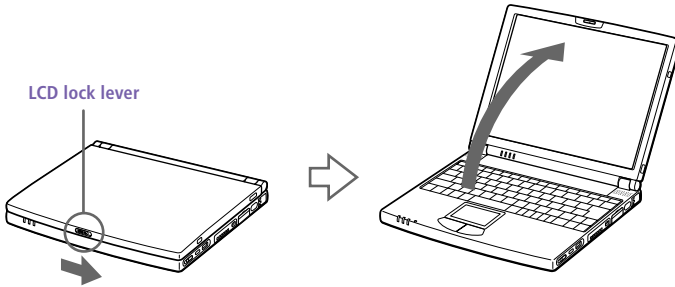
- 1 Turn off the computer and close the cover.
- 2 Slide the lock lever to the **UNLOCK** position.
- 3 Slide the release lever to the **UNLOCK** position and slide the battery away from the computer.



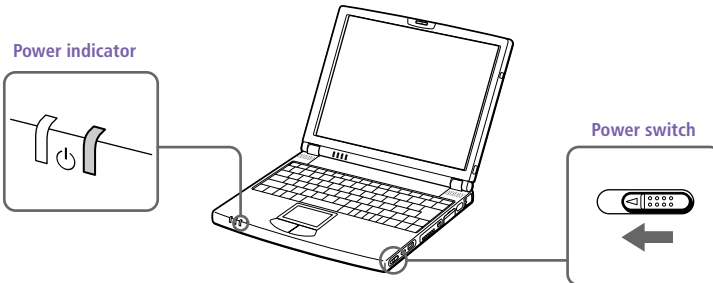
You may lose data if you remove the battery pack while the computer is on and not connected to the AC adapter or if you remove the battery while the computer is in System Suspend mode.

Starting Your Computer

- 1 Slide the LCD lock lever in the direction of the arrow, and lift the cover.



- 2 Slide the power switch on the right side toward the front of the computer until the green power indicator light turns on.



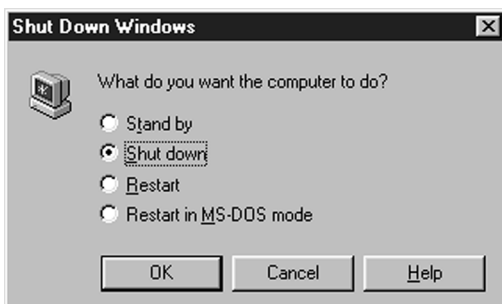
If you hold the power switch in the On position for more than four seconds, the computer turns off.

- 3 If necessary, adjust the brightness controls for the LCD display. To decrease the brightness, press Fn+F5 and then the down or left arrow key. To increase the brightness, press Fn+F5 and then the up or right arrow key.

Shutting Down Your Computer

! To avoid potential loss of data, follow these steps to shut down your computer.

- 1 Click the Start button on the Windows® 98 taskbar.
- 2 Click Shut Down at the bottom of the Start menu to display the Shut Down Windows dialog box.



- 3 Select Shut down.
- 4 Click OK.



Respond to any prompts warning you to save documents.

- 5 Wait for your computer to turn off automatically. The power indicator turns off.
- 6 Turn off any peripherals connected to your computer.



If you are unable to shut down your computer using the steps described above, press the Ctrl+Alt+Delete keys at the same time to restart the computer. If you are unable to restart the computer in this way, you can slide the power switch forward and hold for four seconds. This operation may result in data loss.

During a period of inactivity, you can conserve battery life by using System Suspend mode. See "Controlling Power Management" in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™* Notebook.

Configuring Microsoft® Windows® 98

The first time you turn on your computer, you need to complete a few steps to configure the Windows operating system that is already installed on your computer.



You must configure Windows 98 before you can use the computer.

The on-screen instructions guide you through the configuration process. The following is an overview of the process.

- 1 Entering information:
 - ☐ Enter your name.
 - ☐ Read and accept the License Agreement.
 - ☐ Enter the product ID number located on the Certificate of Authenticity on the cover of the Microsoft® Windows 98 *Getting Started* manual.
- 2 Windows 98 setup: Click the Finish button on the Windows 98 Setup Wizard screen.
- 3 Selecting your computer settings: If necessary, change the Time Zone, Date and Time on the Date/Time Properties screen.
- 4 Registering your computer: For details on the benefits of registration, see “Registering Your Computer” on page 14. You may sign up for Internet access with a Sony preferred Internet Service Provider.

Registering Your Computer

You can take advantage of Sony's commitment to quality customer support and receive the following benefits by registering your computer with Sony:

- ❑ **Sony Customer Support** – Talk to a Support Representative to troubleshoot problems you may be having with your computer.
- ❑ **Extended Limited Warranty** – Protect your investment. Extend your Warranty nine months for a total of 12 months from the original date of purchase when you register your computer.
- ❑ **Express service** – Provides convenient resolution of problems.

If you have not already registered, follow these steps to use your notebook computer's online registration service.



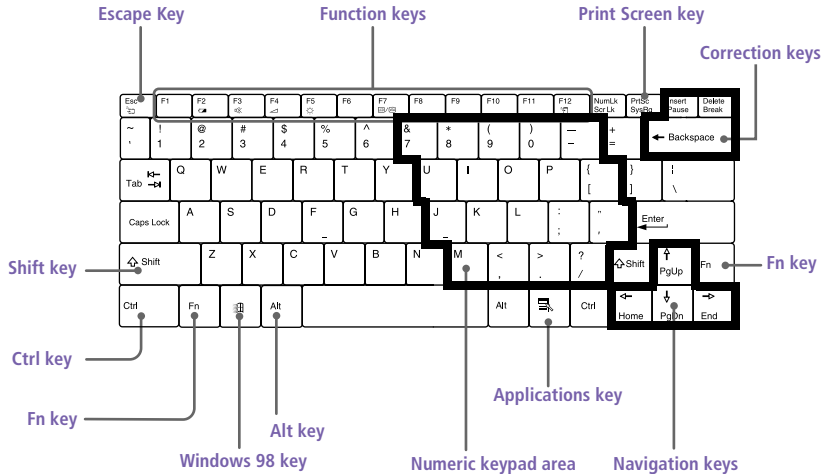
You must connect your phone line before using any online services, including the online registration service. See "Connecting a Phone Line" on page 37.

- 1 Click the Sony VAIO Registration icon on the VAIO desktop.
- 2 Enter the information requested on the first online registration form. Press the Tab key to move from box to box.
- 3 Click the Next button to advance to the next form.
- 4 Complete the remaining forms by clicking the Next button each time you complete a form.



The computer automatically transfers your registration information using your built-in modem and a toll-free telephone number.

Using the Keyboard










Your keyboard is very similar to a typewriter's, but the keyboard has additional keys that perform specific computer-related tasks.






Key	Description
Numeric keypad area	Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Note that you must press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock light will be on.)
Navigation keys	Several keys are devoted to moving the cursor on the screen (the four arrow keys which also function as the Home, End, Page Up, and Page Down keys).
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.
Function keys	The twelve function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, F1 is the Help key. The task associated with each function key may vary from one application to the next.





<i>Key</i>	<i>Description</i>
Escape key	The Esc (Escape) key is used to cancel commands
Print Screen key	The Print Screen key takes an electronic snapshot of the screen and places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.
Operator keys	Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols such as @ and \$.
Windows 98 key 	The key with the Windows logo displays the Windows 98 Start menu; it is the equivalent of clicking the Start button on the task bar. See “Combinations and Functions with the Windows 98 Key” on page 17.
Fn key	The Fn key is used in combination with other keys to issue commands. The Fn keys at the left and right sides both work the same. See “Combinations and Functions with the Fn Key” on page 19.
Applications key 	The Applications key displays a shortcut menu of context-sensitive choices; pressing this key is the equivalent of clicking the right mouse button.

Combinations and Functions with the Windows 98 Key




















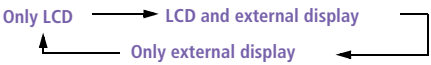

<i>Combinations</i>	<i>Functions</i>
 + F1	Displays Windows Help.
 + Tab	Switches the selected button on the taskbar.
 + E	Displays Windows Explorer.
 + F	Displays the Windows Find: All Files window to find a file or folder. This is the equivalent of selecting Find and then Files or Folders from the Start menu.
 + Ctrl + F	Displays the Windows Find: Computer window where you can locate other computers. This is the equivalent of selecting Find and then Computer from the Start menu.
 + M	Minimizes all displayed windows.
Shift +  + M	Returns all minimized windows to their previous size.
 + R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn +  + Insert	Displays the Properties window. This is the equivalent of clicking the System icon in the Control Panel.

Indicators

<i>Indicators</i>	<i>Functions</i>
Information 	Turns on when the PPK Timer is set. Turns off when the PPK Timer is not set or the PPK Timer setting is inactive (such as when the computer's power is off or in System Hibernation mode).
Battery 	Indicates the status of the battery attached at the rear of the computer.
Power 	Lights when the power to the computer is turned on. Flashes in System Suspend mode. Turns off when the computer is in System Hibernation mode or powered off.

<i>Light</i>	<i>On</i>	<i>Off</i>
Hard disk 	Data is being read from or written to the hard drive. Do not enter System Suspend mode or turn off the computer when this indicator light is on.	The hard drive is not being accessed.
Num Lock 	The number keys in the numeric keypad are active.	The character keys in the keypad area are active.
Caps Lock 	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock 	The screen scrolls differently. (Exactly how it scrolls depends on the specific application. It has no effect in many applications.)	Information moves across the display normally.

Combinations and Functions with the Fn Key

Combinations/ Feature	Functions
Fn+  (ESC) System Suspend	Puts the system into System Suspend mode, a power management state. To return the system to the active state, press any key or press the power switch on your computer.
Fn+  (F2) Display power status	Displays the power status, as in the example below: <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  <p>Using AC power</p> </div> <div style="text-align: center;">  <p>Charging the battery</p> </div> <div style="text-align: center;">  <p>Battery 60%</p> </div> </div>
Fn+  (F3) Speaker switch	Toggles the built-in speaker off and on.
Fn+  (F4) Speaker volume	Adjusts the built-in speaker volume. To increase volume, press Fn+F4, then  or  . To decrease volume, press Fn+F4, then  or  .
Fn+  (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5 and then  or  . To decrease light intensity, press Fn+F5 and then  or  .
Fn+  /  (F7) Switch to the external display	Toggles through the LCD, external display (connected to the  Monitor connector on the port replicator) and both LCD and external display. <div style="text-align: center; margin-top: 10px;">  </div>
Fn+  (F12) System Hibernation	Provides for the lowest level of power consumption. When you execute this command, the state of the system and state of the peripheral devices are written to the hard disk and the system power is turned off. To return the system to the original state, use the power switch to turn on power.
Fn+B Mega-Bass switch	Toggles the mega-bass function off and on. This feature is available with headphone only.
Fn+D Video standby	Turns off the LCD in order to save power.

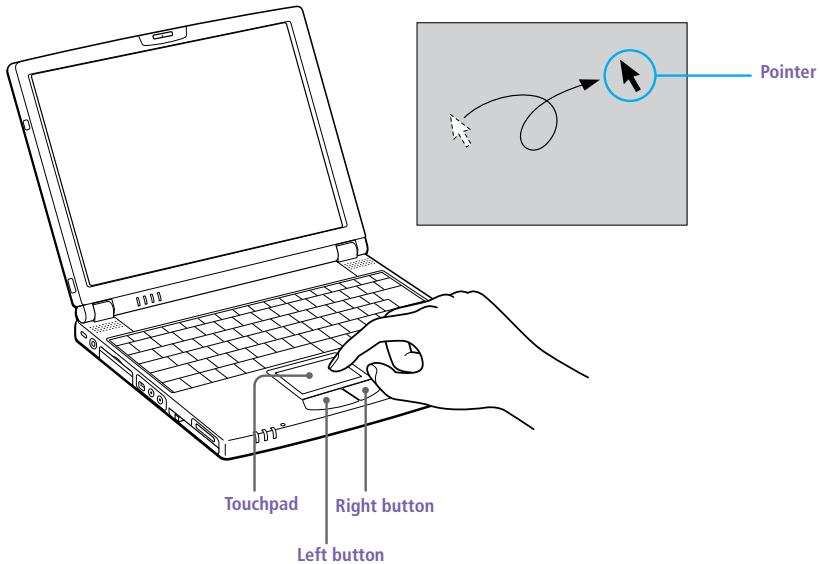
<i>Combinations/ Feature</i>	<i>Functions</i>
Fn+F Change the display size	Zooms the display size in or out when the display is set to less than maximum resolution.
Fn+S System Idle	Puts the system into System Idle mode, a power management state. To return the system to the active state, press any key.



Some functions are not available until Windows launches.

Using the Touchpad

The keyboard contains a cursor-pointing device called a touchpad. You can point to, select, drag, and scroll objects on the screen using the built-in touchpad.



<i>Actions</i>	<i>Descriptions</i>
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.
Right-click	Press the right button once. In many applications, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom edge to scroll horizontally. (The scroll function is available only with applications that support a touchpad scroll feature.)



See Mouse Help for information on touchpad features, such as clicking both buttons simultaneously, adjusting touchpad speed, Web Assist, Tap Off, and Easy Launcher functions. To access Mouse Help, press the Start button, select Settings, and then select Control Panel. Click the Mouse icon in the Control Panel and click the Help button.

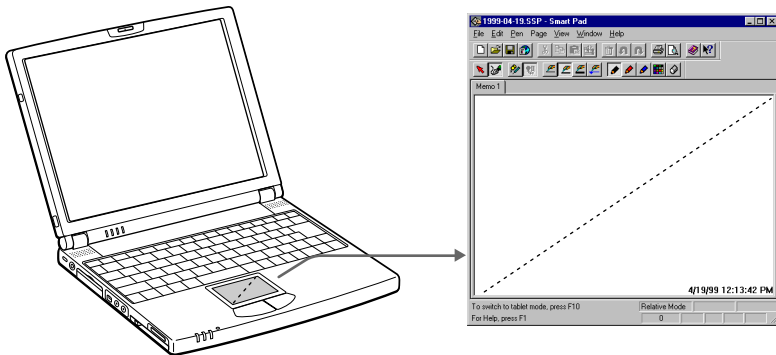
Using Smart Pad

Smart Pad is an application that lets you create memos by writing on the touchpad using your finger.

To use Smart Pad

- 1 Click the Start button on the Windows 98 taskbar.
- 2 Point to Programs, point to Smart Utilities, and then click Smart Pad.
- 3 Press the F10 key.

Smart Pad enters tablet mode. In this mode the touchpad corresponds with the Smart Pad screen. This means that what you write on the touchpad appears on the screen in the corresponding location. For example, when you write letters on the left corner of the touchpad, the letters appear on the left corner of the screen.



- 4 To write, move your finger slowly on the touchpad.

As you write, the letters you wrote on the touchpad appear on the screen.



To learn more about Smart Pad, click Help on the Smart Pad screen to display the online help file.

Using the Floppy Disk Drive

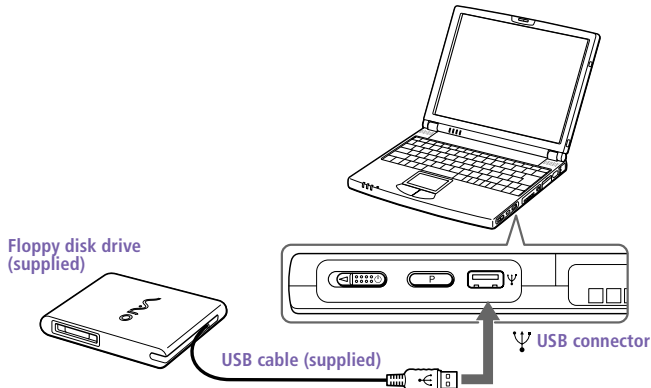
You can connect the floppy disk drive to the Ψ (USB) connector on your computer:

To connect the floppy disk drive



You do not need to shut down the computer before connecting or disconnecting the floppy disk drive.

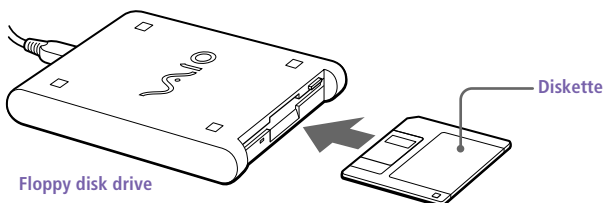
Plug the USB cable into the Ψ (USB) connector on the computer and the other end into the USB connector on the floppy disk drive. The VAIO logo on the disk drive should be facing up.



To use another USB device, such as a USB mouse, at the same time, plug it into the Ψ (mini USB) connector on the right side of the computer by using the supplied conversion adapter.

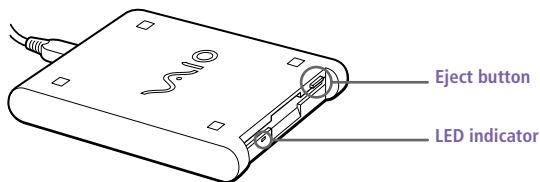
To insert a diskette

- 1 Hold the diskette with the label side facing up.
- 2 Gently push the diskette into the drive until it clicks into place.



To remove a diskette

- When you finish using the diskette, wait until the LED indicator turns off and then press the Eject button to remove the diskette.



To remove the floppy disk drive

Wait until the LED indicator turns off, and then unplug the USB cable from the computer.

To carry the floppy disk drive

Fold the floppy disk cable into the compartment on the side of the floppy disk drive.

Using **Memory Stick™** Cards

This new compact, portable, and versatile IC recording medium has a data capacity exceeding that of a floppy disk. The card is specially designed for exchanging and sharing digital data with compatible products. Because it is removable, the card can be used for external data storage.



You can enjoy video clips that you have recorded with **Memory Stick**-compatible video camera recorders. For details, see the PPK Setup online manual.

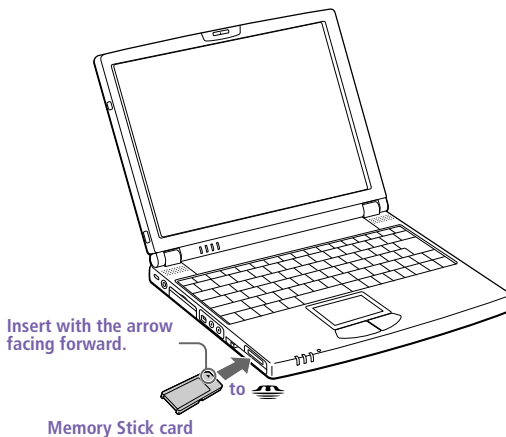
The card slot can accommodate one 4 MB, 8 MB, or 16 MB card.

To copy images from a digital video camera via **Memory Stick** card, see "Connecting an i.LINK device" on page 49.

To copy images from a digital still camera via the Memory Stick card, see "To connect a digital still camera" on page 45.

To insert a **Memory Stick** card

Insert the card into the slot until the card is fixed into the connector.



When the card is connected properly, you can see the contents of the card by clicking the Removable Disk (S:) icon.



Do not insert the card in the wrong direction as this may damage the connector pins in the slot or the card itself.

To remove a Memory Stick card

Make sure the access light is off. Push the card in toward the computer. When the card comes out, pull it out. The **Memory Stick** window closes automatically when you remove the card.



When the card's erasure prevention switch is set to LOCK, data cannot be recorded or erased.

Before using cards, you should back up important data.

Wait a minimum of 10 seconds after the card finishes reading or writing data before removing it. If the card is removed prematurely, a blue screen with an error message appears, prompting you to continue or exit. Re-insert the card into the slot and press Enter to continue. This allows the card to finish reading or writing data.

To avoid damaging data:

- ☐ Do not remove a card or turn off the power while the access light is on.
- ☐ Do not use cards in locations that are subject to static electricity or electrical noise.

Do not touch the card connector with your finger or metallic objects.

Do not attach labels other than the supplied label to a card.

Do not bend, drop, or apply strong shock to cards.

Do not disassemble or modify cards.

Do not allow cards to get wet.

Do not use or store cards in a location that is subject to:

- ☐ Extremely high temperatures, such as in a car parked in the sun
- ☐ Direct sunlight
- ☐ High humidity or places with corrosive substances

To prolong the life of cards, use the supplied storage case.

See the instructions that come with your card for more information on use.

To create a slide show that launches automatically when you insert a Memory Stick card

If you want to create a slide show that launches automatically when you insert a card, follow these steps to transfer images from your hard drive to a card.

- 1 Insert the card into the card slot.
- 2 Double-click the My Computer icon on the desktop.
- 3 Double-click the Removable Disk S: icon.

- 4 Create a new folder and name it “DCIM.”
- 5 Open the DCIM folder and create a new folder named “100MSDCF.”
- 6 Click the Start button, select VAIO, then click PictureGear to launch the PictureGear application.
- 7 Select the digital images you want to save in your slide show.
- 8 From the PictureGear File menu, select Format Conversion.
- 9 Select **Memory Stick** as the Output Format.
- 10 Use the Browse button to select the DCIM/100MSDCF folder on the Removable Disk (S:) drive.
- 11 Click OK to save the file.


You can also add MPEG1 video files to your Slide Show by following the steps below. Note that the order in which digital still photos (DSC0xxxx files) and video clips (MOV0xxxx files) appear in your Slide Show is determined by the number (xxxx) in the file name.

- 1 Insert the card into the card slot.
- 2 Double-click the My Computer icon on the desktop.
- 3 Double-click the Removable Disk S: icon.
- 4 Create a new folder and name it “MSSONY.”
- 5 Open the MSSONY folder and create a new folder named “MOML0001.”
- 6 Copy the MPEG file into the MOML0001 folder.
- 7 Rename the MPEG file MOV0xxxx.mpg, where xxxx is any four-digit number.

To set PPK Setup to launch **Memory Stick** automatically, see *Customizing Your VAIO® Z505 SuperSlim Pro™ Notebook*.

Using PC Cards

Your computer includes a PC card slot. PC cards allow you to connect portable external devices, such as a CD-ROM drive.


 The PC card slot can accommodate one Type I or Type II PC card. This slot is compatible with 16 bit card and Card Bus. ZV (Zoomed Video) port is not available.

Some PC cards may require that you disable idle devices when using the PC card. You can use Sony Notebook Setup to disable devices. See "Displaying the Sony Notebook Setup Screen" in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™* Notebook for details.

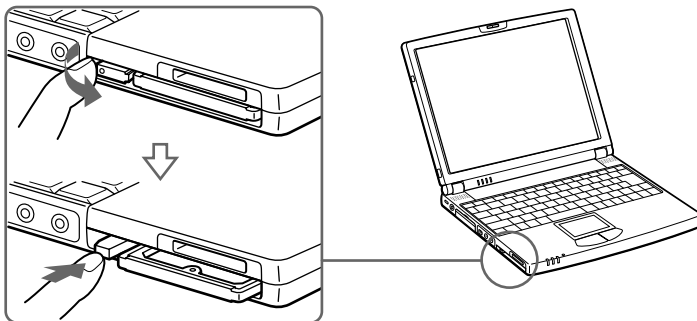
Be sure to use the most recent software driver provided by the PC card manufacturer.

If an "!" mark appears on the Device Manager tab in the System Properties dialog box, remove the software driver and then reinstall it.

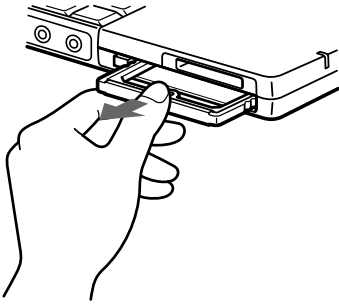
To insert a PC card

 You do not need to shut down the computer before inserting or removing a PC card.

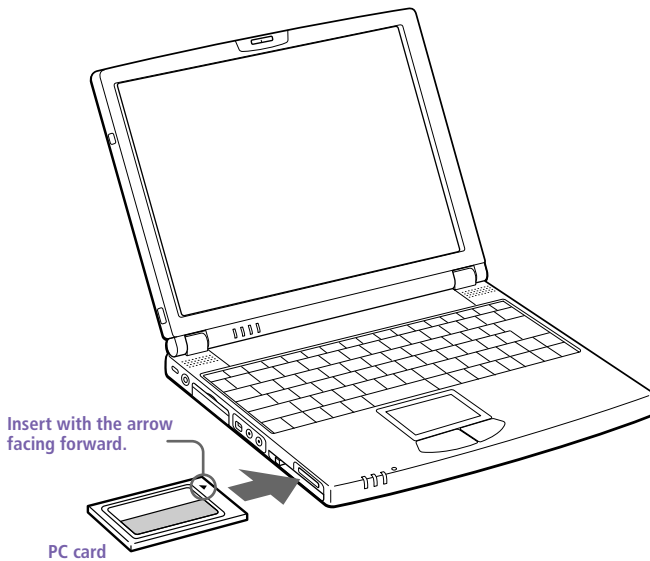
- 1 Pull the PC card release button up away from the computer and push it in towards the computer.



- 2 Remove the PC card slot protector.



- 3 Insert the PC card into the PC card slot, front label facing up. Gently push the card into the slot until the card is fixed into the connector. The release button comes out.



Do not force a card into the slot. It may damage the connector pins.

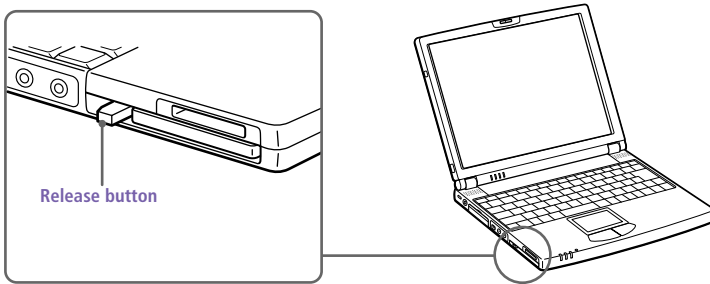
If you have difficulty inserting a card, check that you are inserting the card with the correct orientation.

See the manual that came with your PC card for more information on its use.

To remove a PC card

For some PC cards, if you alternate between normal power operation and the System Suspend or System Hibernation power management modes while the card is inserted, you may find that a device connected to your system is not recognized. Reboot your system to correct the problem.

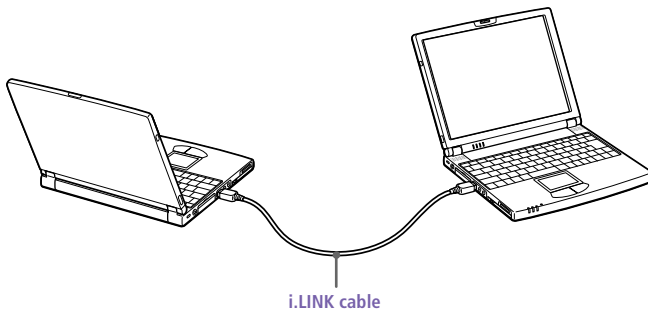
- 1 Close any applications that use the PC card. Otherwise data may be lost.
- 2 Click the PC card icon in the taskbar and close the card.
- 3 Pull the PC card release button up and press it in towards the computer.



- 4 Gently grasp the card and pull it out.
- 5 Insert the PC card slot protector into the empty slot.

Using Smart Connect

The pre-installed Smart Connect software allows you to use an i.LINK cable (not supplied) to connect your VAIO Z505 SuperSlim Pro notebook to another VAIO computer that also has Smart Connect. You can then use one computer to copy, delete, and edit files on the other computer. You can also print from a printer attached to either computer. See the Smart Connect online help for more information.



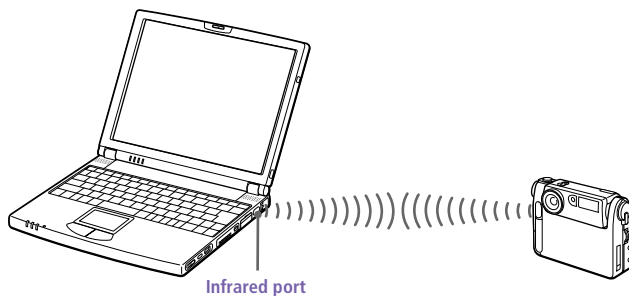
i.LINK cables compatible with your VAIO Z505 SuperSlim Pro notebook include cables with the following part numbers: VMC-IL4415 (a 1.5 meter cable with a 4-pin connector at each end), VMC-IL4435 (a 3.5 meter cable with a 4-pin connector at each end), VMC-IL4615 (a 1.5 meter cable with a 4-pin connector at one end and a 6-pin connector at the other), and VMC-IL4635 (a 3.5 meter cable with a 4-pin connector at one end and a 6-pin connector at the other).

Using Infrared Communication Devices

Your computer includes an infrared port, located on the right side of the computer. You can use this port to communicate with other infrared-equipped devices with compatible protocols, such as a digital still camera or other computers.

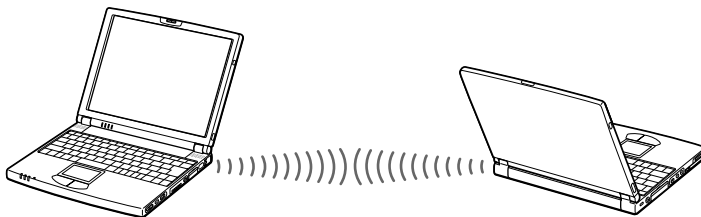
To use infrared communication with a digital still camera

Align the infrared ports on the computer and the digital camera so that they are in a direct line.



To use infrared communication with another computer

Align the infrared ports on the two computers so that they are in a direct line.



Infrared communication capability can be turned on and off. By default, it is not enabled when your system is shipped. To enable infrared use, click the Infrared icon in the Windows Control Panel, and select the Enable infrared communication checkbox on the Options tab.

You can disable infrared communication when you are not using it to conserve battery life.

Use the Infrared icon in the Windows Control Panel to enable and disable infrared communication. Do not use the icon in the taskbar.

Check the Status tag of the Infrared Monitor in the Windows Control Panel to determine if the infrared device is detected.

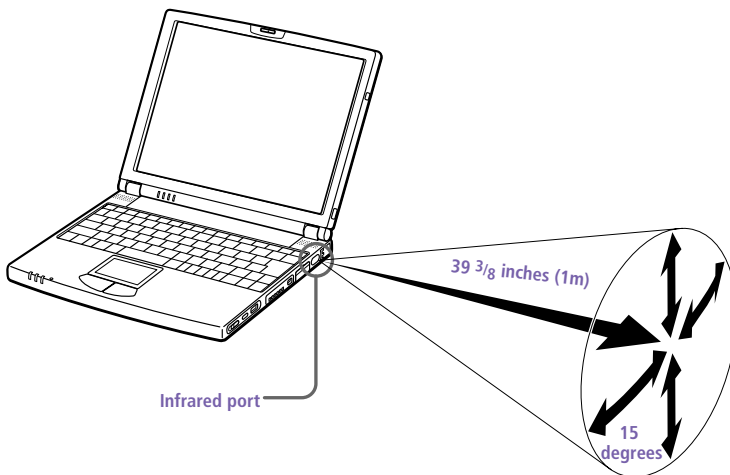
If the two devices are too far apart or too close together, data transfer may be interrupted or there may be noise in the transmission.

Do not cover the infrared ports with your hand or any other objects.

Avoid direct sunlight, fluorescent light, or flashing incandescent light near the infrared ports.

See the manual that came with your digital still camera or other infrared communication device for more information on installation and use.

The active area of infrared transmission extends about $39 \frac{3}{8}$ inches (1m) with a radius of 15 degrees.



Using Power Saving Modes

When you use a battery as the source of power for your computer, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which allows you to turn off specific devices, your computer has three distinct power saving modes: System Idle, System Suspend and System Hibernation. When using battery power, you should be aware that the computer automatically enters System Hibernation mode when the remaining battery charge drops approximately 7% (with PCGA-BPZ51), regardless of the power management setting you select.



If your battery level falls to less than 10%, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

Normal Mode

This is the normal state of your computer when it is in use. The green power indicator light is on in this mode. To save power, you can turn off a specific device such as the LCD or the hard disk.



For details, see “Controlling Power Management” in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™* Notebook.

System Idle Mode

This mode is convenient if you do not need to use your computer for a brief period. The hard disk and video display enter a low power state, and the CPU clock and processor stop. The power indicator light is tan in this mode.

To activate System Idle mode

Press Fn+S. You can also use the PowerPanel utility to enter System Idle mode.

To return to normal mode

Press any key.

System Suspend Mode

The computer saves the current state of the system in RAM and switches off power to the CPU. The tan power indicator light flashes in this mode.

To activate System Suspend mode

Press Fn+Esc. You can also use the PowerPanel utility to enter System Suspend mode.

To return to normal mode

Press any key.

System Hibernation Mode

The state of the system is saved on the hard drive and power is turned off. The power indicator light is off in this mode.

To activate System Hibernation mode

Press Fn+F12. You can also use the PowerPanel utility to enter System Hibernation mode.

To return to normal mode

Turn on the computer by sliding the power switch forward. The computer returns to its previous state.



When returning from System Hibernation mode, the system status stored on the hard disk is erased and the computer starts normally if you slide the power switch forward and hold for more than four seconds.

- ❑ Time to return to normal mode:
System Idle requires less time than System Suspend, and System Suspend requires less time than System Hibernation.
- ❑ Power consumption:
System Idle uses more power than System Suspend, and System Suspend uses more power than System Hibernation.

Connecting Peripheral Devices

You can add functionality to your computer by connecting any of these peripherals:

- ❑ Phone line (page 37)
- ❑ Port replicator (page 39)
 - ❑ Printer (page 41)
 - ❑ External display (page 42)
 - ❑ Desktop computer or serial device (page 44)
- ❑ CD-ROM drive (page 46)
- ❑ i.LINK device (page 49)
- ❑ Universal Serial Bus (USB) device (page 51)
- ❑ External display (page 53)




Turn off the computer before connecting peripherals. In normal use, you should turn on the peripherals before turning on the computer. You can connect i.LINK and USB devices while the computer is on.

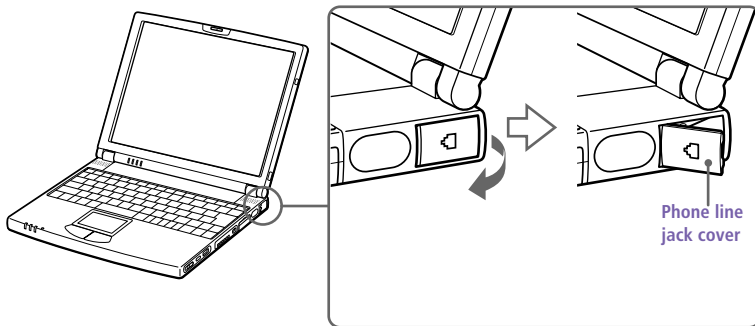
Connect the AC adapter only after connecting all cables.

Connecting a Phone Line

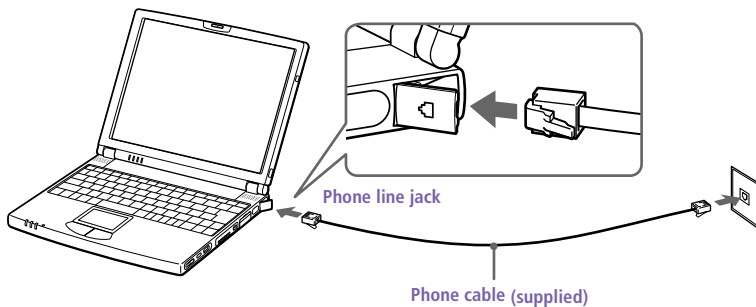
You need to connect a phone line to take advantage of online services, the Internet, and Sony Customer Support.


 In order to register your Sony VAIO Z505 SuperSlim Pro notebook, register your software online, and use Sony Customer Support, you must connect to a phone line. Also, you must register your computer to receive the extended warranty.

- 1 Open the phone line jack cover. The cover opens only to a 45 degree angle.



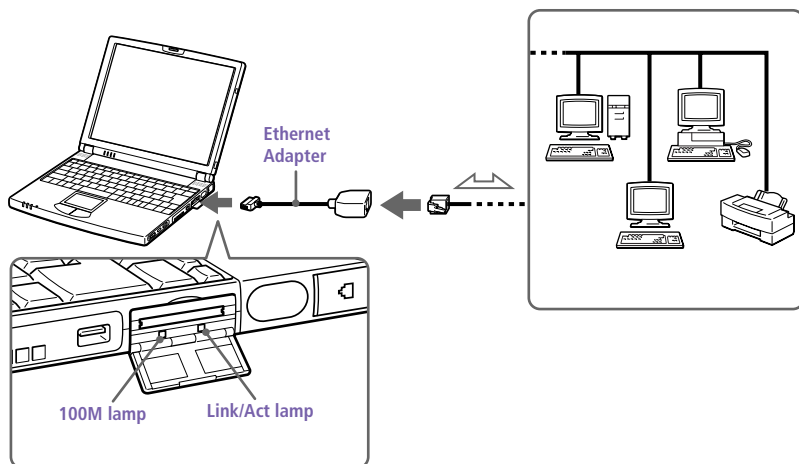
- 2 Plug one end of the phone cable into the jack on the inside of the phone line jack cover. Make sure you insert the phone cable from the rear of the computer and that the modular jack clicks into place.
- 3 Plug the other end into the wall jack.



 Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX). Some of these connections might result in excess electrical current and could cause a malfunction in the internal modem.

Connecting to the Network (LAN)

You can connect your computer to 10BASE-T and 100BASE-TX-type networks via the supplied network cable. For the detailed settings and devices needed to connect to the network, please ask your system manager.



About 100M lamp and Link/Act lamp

100M lamp (green)	ON: Connected to 100BASE-TX type network OFF: Connected to 10BASE-T type network
Link/Act lamp (umber)	The light blinks according to network access

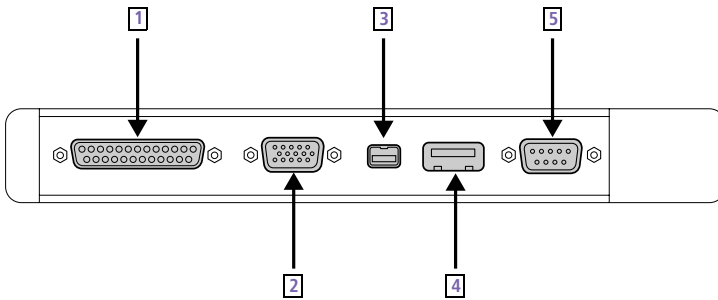




By the default settings, your computer is unable to connect to the network. To connect to the network, check "Ethernet" in Sony Notebook Setup.



Note that the color of the Link/Act lamp is the same as that of the Hard drive indicator light.

Connecting the i.LINK® Port Replicator

You can use the PCGA-UPR5 i.LINK port replicator (supplied) to connect peripheral devices such as a printer or external display. The port replicator has five ports, including an i.LINK port.

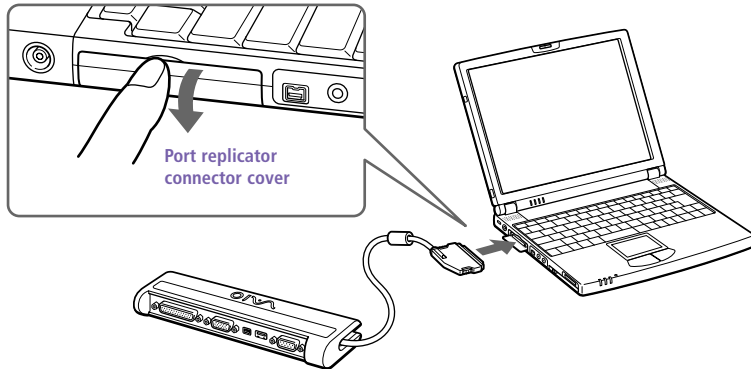


- 1  Printer (page 41)
- 2  Monitor (page 42)
- 3  i.LINK device (page 49)

- 4  USB device (page 51)
- 5  Serial (page 44)

To attach the port replicator

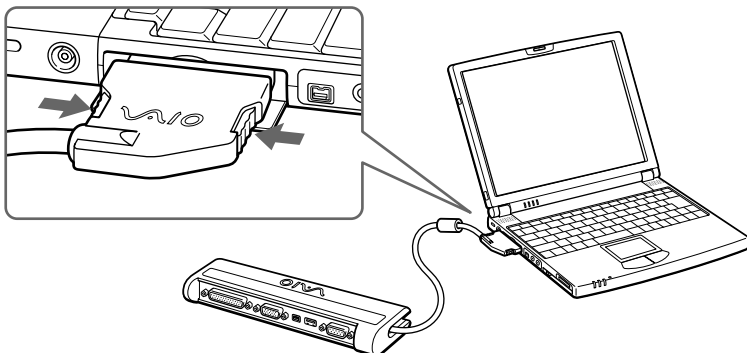
- 1 Turn off the computer.
- 2 Open the port replicator connector cover on the left side of the computer.



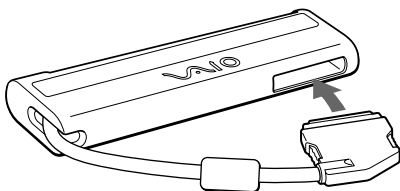
- 3 Plug the port replicator cable into the port replicator connector on the computer.

To remove the port replicator

- 1 Turn off the computer.
- 2 Press both sides of the port replicator cable connector and unplug the cable from the computer.



- 3 Fold the port replicator cable into the compartment on the side of the port replicator.



You cannot use the optional PCGA-PR5 port replicator with your computer.


When you use the port replicator, your computer's USB connector does not work. Use the mini-USB connector instead.

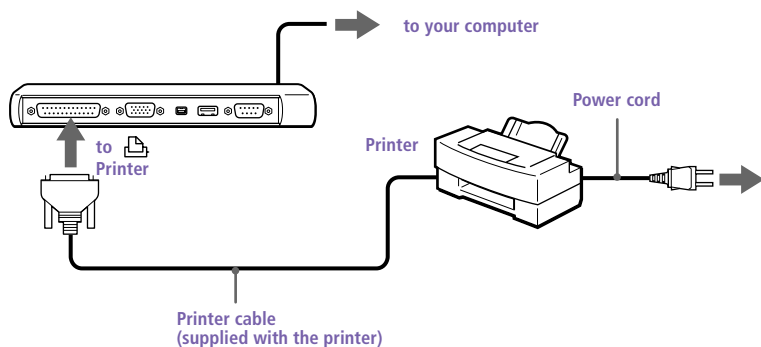
If you do not turn off the computer before removing the port replicator, you must turn off the computer before reattaching the port replicator.

Connecting a Printer

You can use the port replicator to connect a Windows 98-compatible printer or other parallel port device to your computer.

To connect a printer

- Use the  symbol to locate the Printer connector on the port replicator. Plug the printer cable (supplied with the printer) into this connector.



See the manual that came with your printer for more information on installation and use.


Before using the printer, you may need to change the Printer setting in the Sony Notebook Setup software. See "Displaying the Sony Notebook Setup Screen" in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™ Notebook*.

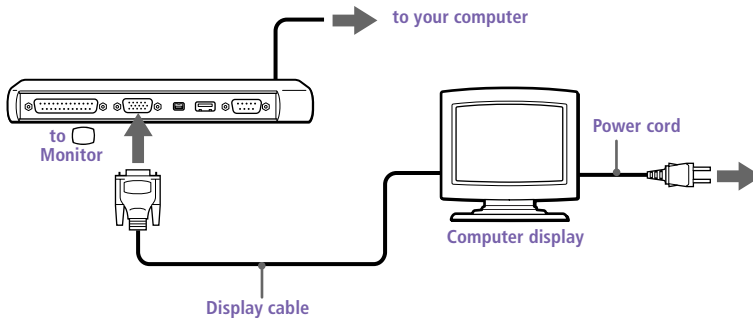
Connecting an External Display

You can use the port replicator to connect an external display to your notebook computer. For example, you can use the computer with any of the following:

- ❑ Computer display (monitor) (page 42)
- ❑ Projector (page 43)

To connect a computer display

- ❑ Use the  symbol on the port replicator to locate the Monitor connector. Plug the display cable into this connector.
- ❑ If necessary, plug one end of the display power cord into the display, and the other end into an AC outlet.



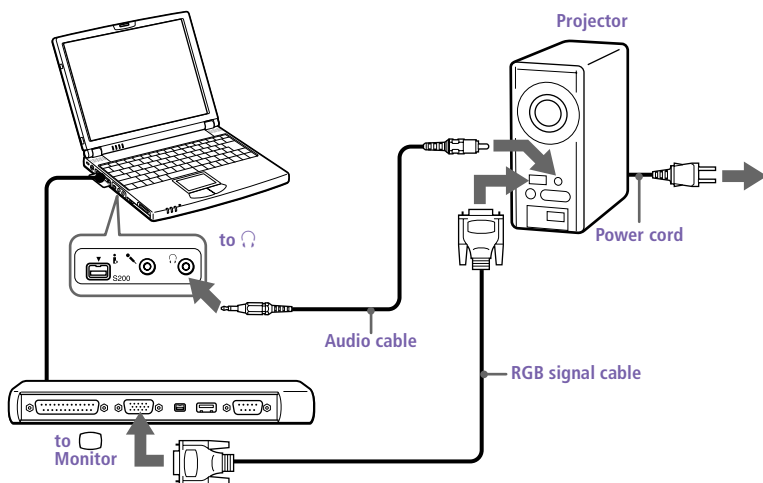
See the manual that came with your computer display for more information on installation and use.

The optional display adapter PCGA-DA5 allows you to connect a display directly to the port replicator connector, eliminating the need for the port replicator.

To connect a projector

You can use a projector as an external display, such as the Sony LCD Projector.

- 1 Use the □ symbol to locate the Monitor connector. Plug the RGB signal cable into this connector.
- 2 Use the ♫ symbol to locate the Headphone connector. Plug the audio cable into this connector.



See the manual that came with your projector for more information on installation and use.


To select a display

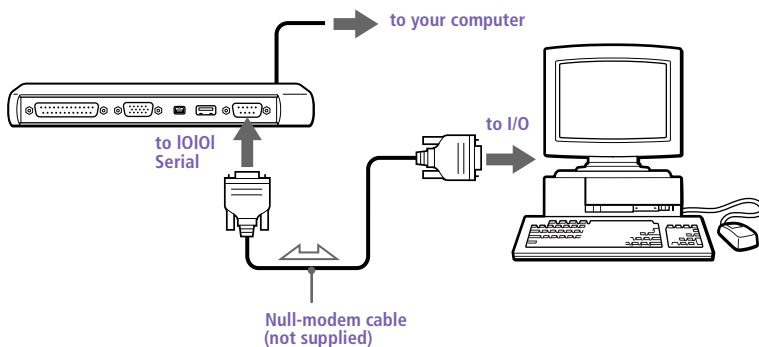
When you connect an external display to the monitor connector, you can press **Fn+F7** to toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices. See “Selecting the Display Mode” in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™ Notebook* for more information.

Connecting a Desktop Computer or Serial Device


You can use the port replicator to connect your notebook computer to another computer, or to connect other peripherals, such as the Sony Digital Still Camera.

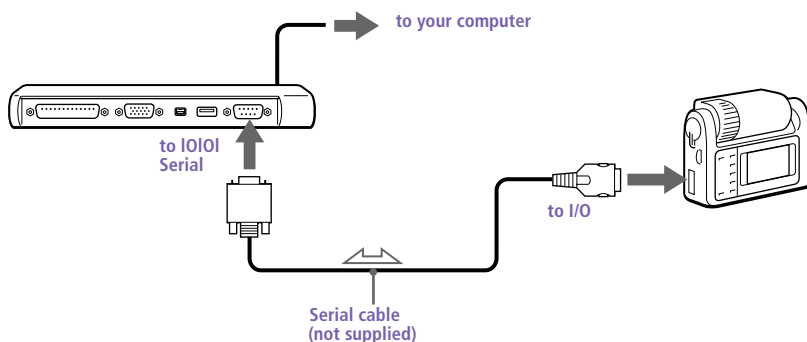
To connect a desktop computer


- Use the  symbol to locate the Serial connector. Plug a null-modem cable (not supplied) into this port on the port replicator and into the serial port on the desktop computer.



To connect a digital still camera

- ❑ If your digital video camera recorder includes a **Memory Stick** slot, you can copy images from it to your computer via a **Memory Stick** card. Copy images to the **Memory Stick** card, and insert the card into the **Memory Stick** slot on your computer. For details on using **Memory Stick**, see “Using Memory Stick™ Cards” on page 25.
- ❑ Use the  symbol to locate the Serial connector. Plug the connecting cable into this port on the port replicator and into the Digital I/O connector on the digital still camera.




 The Sony Digital Still Camera is pictured; you may need to connect your camera differently.

See the manual that came with your digital camera or other serial device for more information on installation and use.

If you use a digital camera that has an infrared data communication system or other infrared communication device, see “Using Infrared Communication Devices” on page 32.

Connecting the CD-ROM Drive

You can use the optional PCGA-CD51 CD-ROM drive with your notebook computer. If you use the optional PCGA-CD51 CD-ROM drive when your computer is running on battery power, the battery life will be shorter. The CD-ROM drive draws power from the computer through a PC card.


 Procedures for connecting the CD-ROM drive may vary, depending on the CD-ROM drive.

See the manual that came with your CD-ROM drive for more information on use.

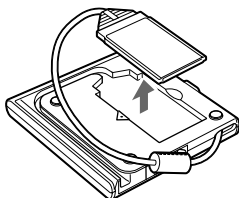
To play an audio CD in the optional PCGA-CD51 CD-ROM drive with your notebook computer, your computer's settings must be set properly. You can check the settings as follows:

- 1) Click the Start button, select Settings, and click Control Panel.
- 2) Click the Multimedia icon.
- 3) Click the CD tab and make sure the "Enable digital CD audio for this CD-ROM device" box is checked. When this box is checked, your notebook computer's settings are correct for playing an audio CD in the PCGA-CD51 CD-ROM drive.

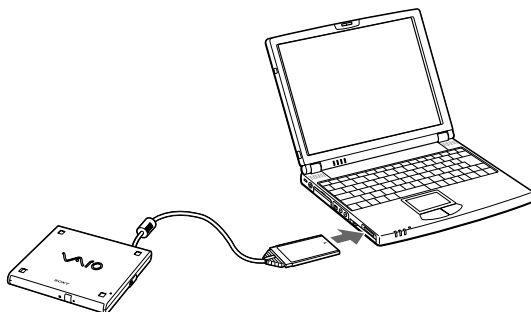
To connect the CD-ROM drive


 You can connect a PCGA-CD51 CD-ROM drive while the computer is on, unless you want to use the System and Application Recovery CDs. Turn off your computer before using the System and Application Recovery CDs.

- 1 Remove the PC card slot protector from the PC card slot. See "Using PC Cards" on page 28 for details.
- 2 Remove the PC card from the bottom side of the CD-ROM drive.



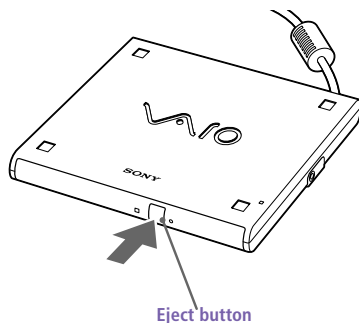
- 3 Insert the PC card into the PC card slot with the SONY logo facing up. See “Using PC Cards” on page 28 for details.



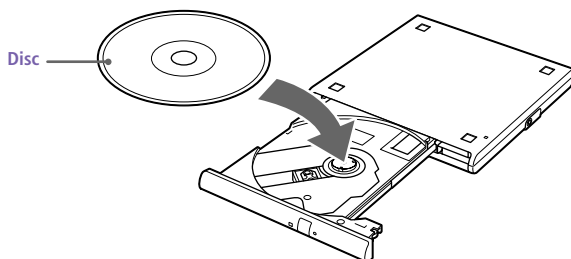
 A protective cover is attached to the lens of the CD-ROM drive at the factory. Before using the CD-ROM drive, remove the protective cover.

To insert a CD-ROM disc

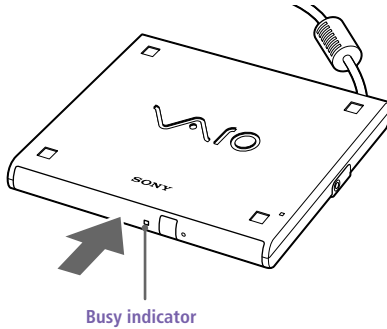
- 1 Press the Eject button. The disc tray slides out.



- 2 Place the CD-ROM disc in the tray with the label side facing up. Push the disc onto the hub until the disc clicks into place.



- 3 Close the tray by pushing it gently. The BUSY indicator on the CD-ROM drive flashes while your computer is reading data from the disc.




To remove the CD-ROM drive

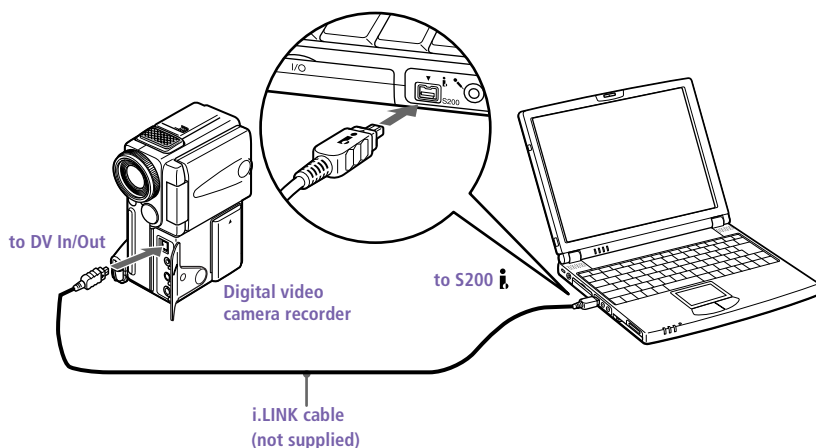
- Remove the PC card from the computer. See “Using PC Cards” on page 28 for details.

Connecting an i.LINK device

Your VAIO Z505 SuperSlim Pro notebook includes an i.LINK (IEEE-1394) connector, which you can use to connect to an i.LINK device such as a digital video camera recorder.

To connect a digital video camera recorder

Plug one end of an i.LINK cable into the S200  connector on the left side of the computer and the other end into the DV In/Out connector on the digital video camera recorder. If your digital video camera recorder includes a **Memory Stick** slot, you can copy images from it to your computer via a **Memory Stick** card. Copy images to the **Memory Stick** card and insert the card into the **Memory Stick** slot on your computer. For details on using **Memory Stick**, see “Using Memory Stick™ Cards” on page 25.





The Sony digital video camera recorder (DCR-PC7) is pictured; your digital video camera recorder may need to be connected differently.

On Sony digital video cameras, connectors labeled "DV In/Out" or "i.LINK" are i.LINK-compatible.

See the manual that came with your digital video camera recorder for more information on installation and use.

The i.LINK connector does not supply power to external devices. If the external device requires power from the i.LINK connector, you cannot use the device with your computer.

The VAIO Z505 SuperSlim Pro notebook supports transfer rates up to 200 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.

The i.LINK features available may vary depending on the software applications you use. See the documentation that came with your software for more information.

See page 31 for a list of i.LINK cables compatible with your VAIO Z505 SuperSlim Pro notebook.

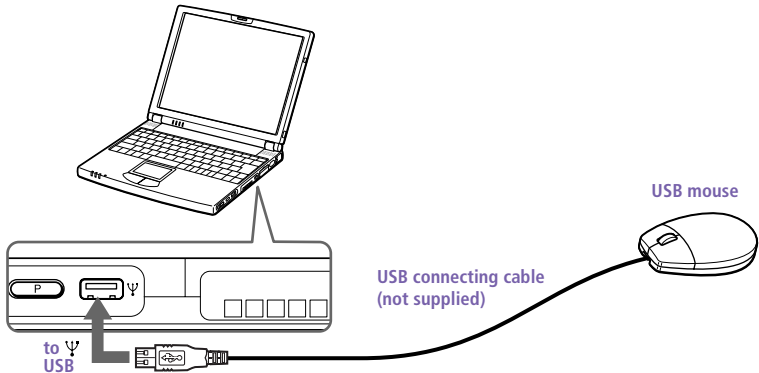
You can connect a digital video camera to the i.LINK connector on your notebook or the i.LINK connector on the optional port replicator. When a camera is connected to the i.LINK connector on the notebook, you should not connect any other devices to the i.LINK connector on the port replicator. When a camera is connected to the i.LINK connector on the port replicator, you should not connect any other devices to the i.LINK connector on the notebook.

Connecting a Universal Serial Bus (USB) Device

You can connect a USB device, such as a USB mouse, to your computer.

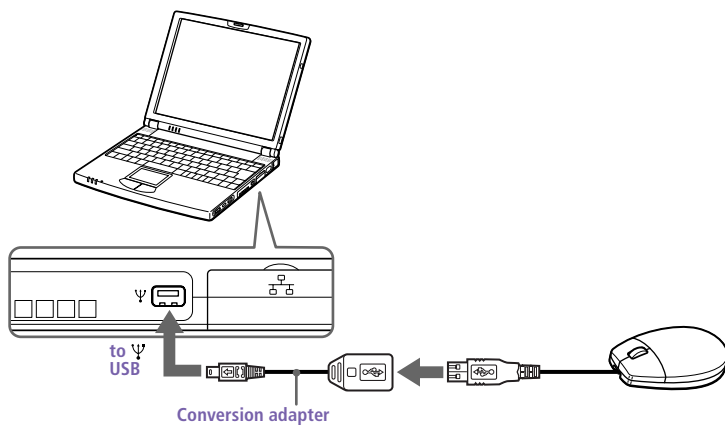
To connect a USB device

Use the Ψ symbol to locate the USB connector on the right side of the computer. Plug one end of the USB cable into this port and the other end into the USB mouse.



When you wish to use another USB device, such as a floppy disk drive, at the same time, connect the second USB device to the Ψ (mini USB) connector by attaching the supplied conversion adapter.

You can use the optional Sony USB mouse (PCGA-UMS1) with this computer. Plug the USB mouse into the USB connector. You do not need to turn off your computer. For more information, connect the mouse, double-click the Mouse tab in the Control Panel, and then click Help in the Mouse Suite tab.



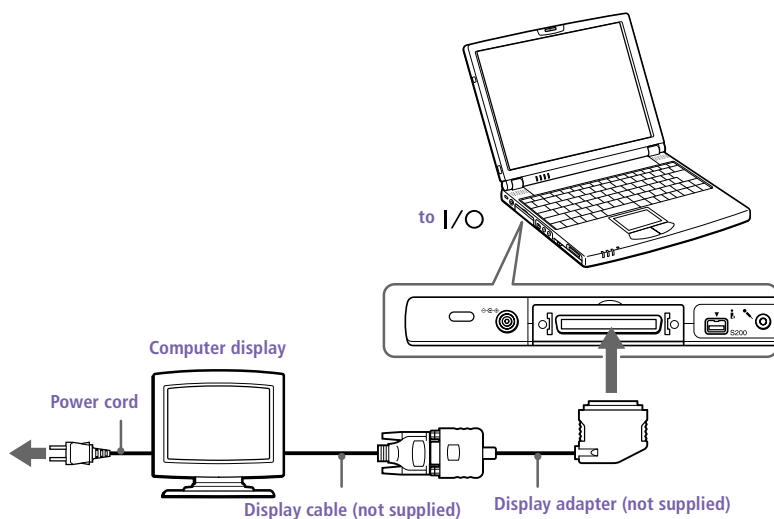
See the manual that came with your USB device for more information on installation and use.


Connecting an External Display

You can connect an external display to your notebook computer. For example, you can use the computer with a computer display (monitor) or projector.

To connect a computer display

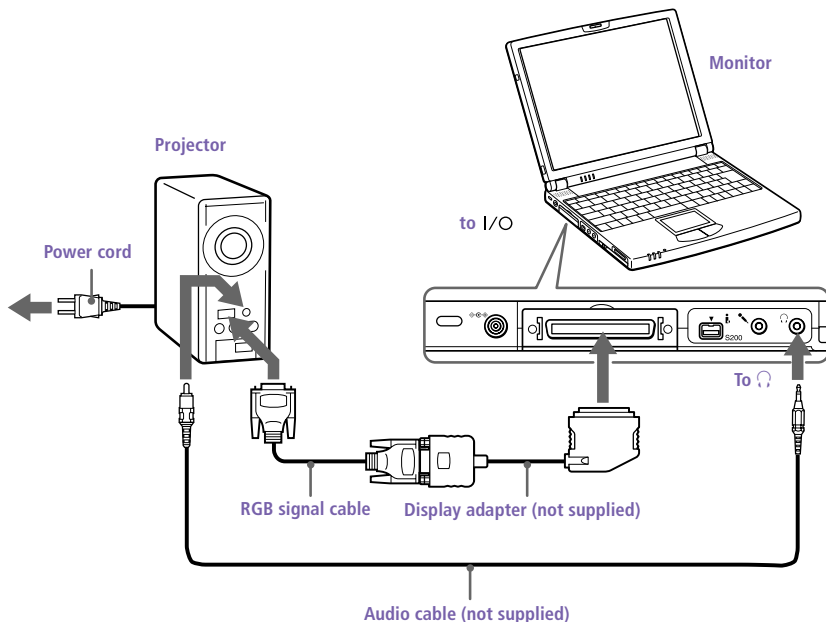
Use the I/O port replicator connector on the left side of the computer. Plug the display adapter (not supplied) into this connector. If necessary, plug one end of the display's power cord into the display, and the other end into an AC outlet.



 See the manual that came with your computer display for more information on installation and use.

To connect a projector

You can use a projector, such as the Sony LCD Projector, as an external display.



See the manual that came with your projector for more information on installation and use.

To remove the display adapter

Press both sides of the display adapter connector and unplug it from the computer.

To select a display

When you connect an external display to your computer, you can press **Fn+F7** to toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices.



See "Selecting the Display Mode" in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™* Notebook for more information.

Adding Memory

In the future you may want to install memory modules to expand the functionality of your computer. You can increase memory to 192 MB by installing an optional memory module. The PCG-Z505R has 64 MB on-board memory; the PCG-Z505RX has 64 MB on-board memory and a 64 MB memory module for a total of 128 MB.

You can add an expansion memory module in a slot. If you have purchased the PCG-Z505R, you can add a 64 MB or 128 MB memory module. If you have purchased the PCG-Z505RX, you can add a 128 MB memory module; this requires removing the supplied 64 MB memory module.*

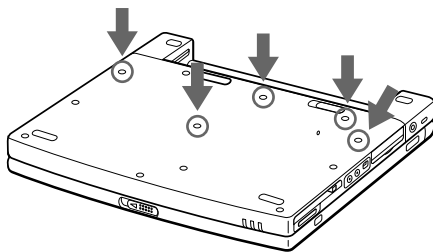
! Make sure you observe the proper safety precautions when you install a memory module in your computer. See the bulleted list below. Be careful when adding memory. Mistakes when installing or removing a memory module may cause a malfunction.

- ❑ The procedures described below assume familiarity with the general terminology associated with personal computers and with the safety practices and regulatory compliance required for using and modifying electronic equipment.
- ❑ Disconnect the system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described below. Failure to do so may result in personal injury or equipment damage.
- ❑ Electrostatic discharge (ESD) can damage disk drives and other components. Perform the procedures described below only at an ESD workstation. If such a station is not available, do not work in a carpeted area, and do not handle materials that produce or hold static electricity (cellophane wrappers, for example). Ground yourself by maintaining contact with an unpainted metal portion of the chassis while performing the procedure.
- ❑ Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- ❑ Use the special bag for preventing ESD or use aluminum foil when you store the memory module.

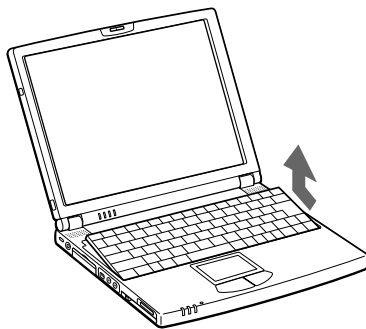
* When you expand the PCG-Z505RX memory to 192 MB, the supplied 64 MB memory module can no longer be used in the PCG-Z505RX.

To install a memory module

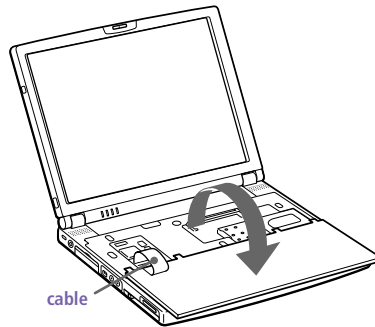
- 1 Shut down your computer and disconnect all peripheral devices, such as your printer.
- 2 Unplug the computer and remove the battery packs.
- 3 Wait until the computer cools down. Then unscrew the five screws with the ● mark on the bottom of your computer.



- 4 Slide the LCD lock lever and lift the cover. Slide the keyboard toward the LCD display, then lift it away slightly.

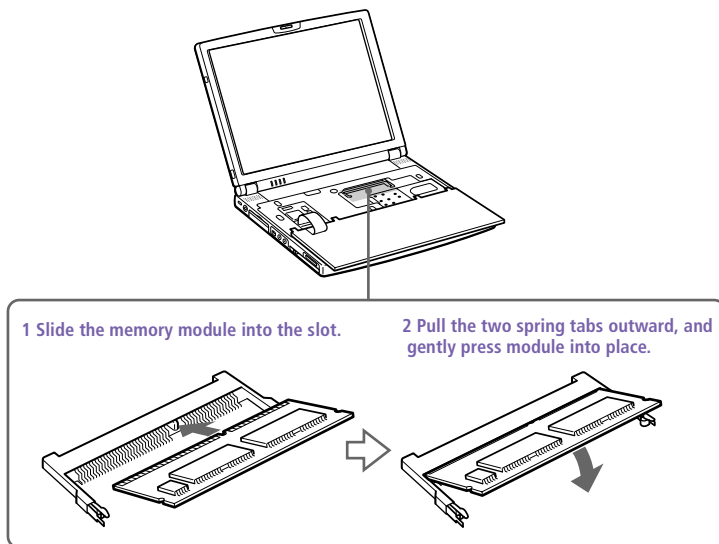


- 5 Lift the keyboard from the LCD display side, then gently turn it over on the space where the touchpad is. Be careful not to detach the cable when lifting the keyboard.

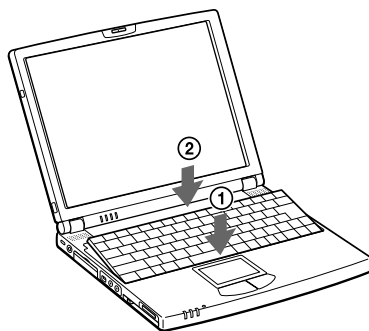


- 6 If you are adding memory to the PCG-Z505RX, you must remove the existing memory module. Follow the instructions in "To remove a memory module" on page 59.
- 7 Remove the memory module from its packaging.

- 8 Install the memory module. Be careful not to touch the other components of the motherboard.



- 9 Gently replace the keyboard, then press it into your computer. Be careful not to detach the cable when lifting the keyboard.

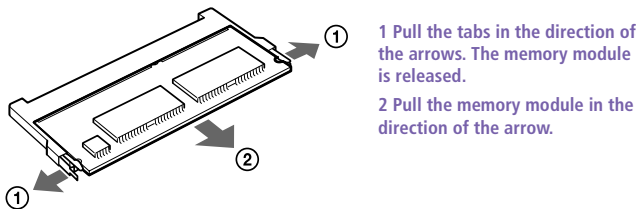


- 10 Close the computer cover, then tighten the screws on the bottom of the computer.
- 11 Turn on the computer.

- 12 Click the Start button, point to VAIO, and click Sony Notebook Setup. The Sony Notebook Setup screen appears.
- 13 Click the About This Computer tab to view the amount of system memory. If the additional memory is not shown, repeat steps 1-12.

To remove a memory module

- 1 Follow steps 1 to 5 of “To install a memory module.”
- 2 Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.
- 3 Remove the memory module.



- 4 Follow steps 8 and 9 of “To install a memory module.”

Troubleshooting

This section describes how to solve common problems you may encounter when using your computer. Many problems have simple solutions, so try these suggestions before you call Sony Customer Support.



When you reconnect devices, be sure to turn off the computer as described in “Shutting Down Your Computer” on page 12. Turning off the computer using other methods may result in data loss.

My computer does not start

- ❑ Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer indicates that the power is on.
- ❑ Check that the battery is inserted properly and that it is charged.
- ❑ Make sure there is no diskette in the floppy disk drive.
- ❑ Confirm that the AC adapter and all cables are connected firmly, as described in “Connecting Peripheral Devices” on page 36.
- ❑ If you plugged the computer into a power strip or UPS, make sure the power strip or UPS is turned on and working.
- ❑ If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness control is adjusted correctly. See the manual that came with your display for details.
- ❑ Moisture condensation may have occurred. Do not use the computer for at least one hour and then turn on the computer.

When I turn on my computer, the message “Operating system not found” appears and Windows does not start

- ❑ Check the floppy disk drive to see if a non-bootable diskette is in the drive.
- ❑ If a non-bootable diskette is in the drive, turn off the computer, remove the diskette, and then turn on the computer again. Confirm that Windows starts properly. If Windows still does not start, follow the procedure below to initialize the BIOS.

- ❑ If the floppy disk drive is empty or contains a bootable diskette, use the following procedure to initialize the BIOS:
 - 1 Remove the floppy disk drive, port replicator, PC card, and any other peripheral devices from the computer.
 - 2 Turn the computer off and then turn it on again.
 - 3 Turn on the computer and press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
 - 4 Press the arrow keys to select the Exit menu.
 - 5 Press the arrow keys to select Get Default Values and then press the Enter key. The message “Load default configuration now?” appears.
 - 6 Check that Yes is selected, then press the Enter key.
 - 7 Press the arrow keys to select Exit (Save Changes) and then press the Enter key. The message “Save configuration changes and exit now?” appears.
 - 8 Check that Yes is selected, then press the Enter key. The computer restarts.

When I turn on my computer, the message “C:\WINDOWS” appears and Windows does not start

- ❑ Enter “win”, then press the Enter key. When the message “MS-DOS is activated. Do you want to return to Windows and restart applications?” appears, press the Enter key again. Windows starts.
- ❑ When shutting down your computer, follow the procedure in “Shutting Down Your Computer” on page 12. Windows should start automatically the next time you turn on your computer.

My LCD does not display anything

- ❑ Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer is on.
- ❑ Check that the battery pack is inserted properly and that it is charged.
- ❑ The computer may be in LCD (Video) Standby mode. Press any key to activate the display.
- ❑ The video output may be directed to an external display attached to the port replicator. Press Fn+F7 until video output appears on the LCD.

The screen image on my external display is not centered or sized properly

Use the controls on your external display to adjust the image. See the manual supplied with your display for more information.

My computer "locks up"

- ❑ Try restarting the computer. On the Windows taskbar, click the Start button, click Shut Down, and then click Restart the computer.
- ❑ If you cannot restart as described in the preceding step, you can restart the computer by pressing Ctrl+Alt+Delete.
- ❑ If the previous step does not work, slide the power switch toward the front and hold it for four seconds. This turns off the power.
- ❑ If your computer locks up while playing a CD-ROM, stop the CD-ROM, and restart the computer by pressing Ctrl+Alt+Delete.



Pressing Ctrl+Alt+Delete or turning off the computer with the power switch may result in data loss in files that are currently open.

My software program "locks up" or crashes

Contact the software publisher or designated provider for technical support.

I cannot print

Try changing the printer port mode. In Sony Notebook Setup, select the Printer/FDD tab. If the printer port mode is set to ECP, change it to bi-directional. If the printer port mode is set to bi-directional, change it to ECP. See "Displaying the Sony Notebook Setup Screen" in the online document *Customizing Your VAIO® Z505 SuperSlim Pro™ Notebook* for details on using Sony Notebook Setup.

Movements of the displayed images are awkward (not smooth)

In PowerPanel, select Change CPU Speed. Remove the check from Auto, and set Speed Control to OS Controlled.

I cannot play a CD-ROM

- ❑ Make sure the label of the CD-ROM is facing up.
- ❑ If the CD-ROM requires software, make sure the software is installed according to the program's instructions.
- ❑ Moisture condensation may have occurred. Disconnect the CD-ROM drive and disconnect the power to the drive for at least one hour.

- ❑ Make sure the CD-ROM drive is properly connected. See “Connecting the CD-ROM Drive” on page 46.
- ❑ Clean the CD-ROM.
- ❑ Check the speaker volume.

When I click an application icon a message appears, such as “You must insert the application CD into your CD-ROM drive,” and the software does not start

- ❑ Some titles require specific files that are located on the application’s CD-ROM. Insert the disc and try starting the program again.
- ❑ Make sure you place the disc in the tray with the label side facing up.

My floppy disk drive cannot write to a diskette

- ❑ The diskette is write-protected. Disable the write-protect feature or use a diskette that is not write-protected.
- ❑ Check that the diskette is properly inserted into the floppy disk drive.

My speaker has no sound

- ❑ The built-in speaker is turned off. Press Fn+F3 to turn on the speaker.
- ❑ The speaker volume is turned to the minimum. Press Fn+F4, and then press \uparrow or \rightarrow to increase the volume.
- ❑ If your computer is powered by the battery, check that the battery is connected properly and that it is charged.
- ❑ If you are using an application that has its own volume control, check that the volume is turned up.
- ❑ Check the volume controls in Windows 98.
- ❑ If you have connected a headphone or an audio cable to the Headphone connector, disconnect the cable.

My modem does not work

- ❑ Check that the phone line is plugged into the line jack. See “Connecting a Phone Line” on page 37 for details.
- ❑ Check that the phone line is working. You can check the line by plugging in an ordinary phone and listening for a dial tone.
- ❑ Check that the phone number the program is dialing is correct.
- ❑ Check that the software you are using is compatible with the notebook computer modem. (All preinstalled programs are compatible.) Call the software publisher or Sony Customer Support.

My modem connection is slow

The computer's modem uses K56flex™ technology/V.90. Many factors influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider, check the following:

- ❑ Have your phone company check that your phone line is free from any line noise.
- ❑ If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- ❑ If you are having a problem connecting with your Internet Service Provider, check that the ISP is not experiencing technical problems.
- ❑ If you have a second phone line available, try connecting the modem to that line.

My mouse does not work

If you have connected an external mouse to the mini USB connector, it may cause some problems when you transfer high-speed or high-capacity data. Use the USB connector.

I cannot use DV devices and messages appear on the screen

- ❑ Check that the DV device is turned on and that the cables are properly connected.
- ❑ If you are using multiple i.LINK devices, the combination of the connected devices may cause unstable operation. In this case, turn off the power to all connected devices and disconnect unused devices. Check the connection, then turn on the power again.

My computer does not shut down

It is best to shut down your computer using the Shut Down command on the Windows 98 Start menu. Using other methods, including those listed here, may result in loss of unsaved data. If the Shut Down command does not work properly, follow these steps:

- ❑ Restart the computer by pressing Ctrl+Alt+Delete. If this does not work, slide the power switch forward and hold it for four seconds.
- ❑ Unplug the computer from the AC adapter and remove the battery pack from your computer.

My PC card is not working

- ❑ Make sure the PC card is compatible with Windows 98.
- ❑ Use the Sony Notebook Setup utility to disable devices you are not currently using.

When I remove the Memory Stick card, an error message appears.

Insert the card into the slot again and press the Enter key. Wait until the active application finishes, then remove the card. If the message confirms eject of the card, click OK.

Power Management

The operating system may become unstable if a lower power state such as system hibernation is initiated and then changed before the operating system completely enters the lower power state. To restore the computer to its normal operating stability, close all open applications, button forward and hold it there for four seconds or more to completely shut down the computer.

Using the System and Application Recovery CDs

The following sections describe how to use the System Recovery and Application Recovery utilities. You need to connect the optional PCGA-CD5 or PCGA-CD51 CD-ROM drive to use the System and Application Recovery CDs.

Using the System Recovery CD(s)

You can reinstall software titles that shipped with your computer if they are corrupted or accidentally erased. You may not need to recover the entire contents of your hard drive. If you experience a problem with your computer, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CDs to reinstall individual applications or device drivers. See “Using the Application Recovery CD(s)” on page 68.

The System Recovery CD contains a backup copy of all the software originally installed on your hard disk drive. **It can be used only to recover the hard disk of the notebook computer you purchased.**

The System Recovery utility gives you three options:

- ❑ **Full Restore without Format** restores all the software titles that originally came with your computer without formatting the hard disk.
- ❑ **Full Restore with Format** formats the hard disk drive and then restores all the original software.
- ❑ **Operating System Only** restores the Windows 98 operating system, the notebook computer utility programs, and the device drivers that shipped with your computer.

! If you choose the Full Restore with Format or Operating System Only option, your hard disk will be formatted, which removes all the information on the hard disk drive. You will lose any software you have installed and any other files you have created since you started to use your computer. This means you will have to reinstall any applications that were not included with the computer when you purchased it. If you choose the Full Restore without Format option, you may need to reinstall applications that were not included with the computer when you purchased it. If you have any questions on using the System Recovery CD, contact Sony Customer Support.

To use the System Recovery CD(s)



The optional PCGA-CD5 or PCGA-CD51 CD-ROM drive must be connected to the computer to use the System Recovery CD.

You need to complete the Windows® 98 registration process when you use the System Recovery CD. Make sure you have the product ID number located on the cover of your Microsoft Windows 98 Getting Started manual. You will need this number to complete the recovery process.

- 1 Insert the Sony System Recovery CD in the CD-ROM drive.
- 2 Shut down your computer as described in “Shutting Down Your Computer” on page 12.
- 3 Wait four seconds and turn on your computer.
- 4 Click OK to signify you have read and accept the Microsoft End-User License Agreement.
- 5 When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.



Your system may include one or two System Recovery CDs. If you have two System Recovery CDs, insert the first CD to run the System Recovery program. You are prompted to insert the second CD once the information from the first CD has been installed.

The recovery process takes 30 to 60 minutes to complete.

If your computer does not start from the Recovery CD

- 1 Slide the power switch forward and hold it for more than four seconds to turn off the computer.
- 2 Turn on the computer and press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
- 3 Press the arrow keys to select the Exit menu.
- 4 Press the arrow keys to select Get Default Values and then press the Enter key. The message “Load default configuration now?” appears.

- 5 Check that Yes is selected, then press the Enter key.
- 6 Press the arrow keys to select Exit (Save Changes) and then press the Enter key. The message “Save configuration changes and exit now?” appears.
- 7 Check that Yes is selected, then press the Enter key. The computer restarts from the Recovery CD.

Using the Application Recovery CD(s)

The Application Recovery CDs allow you to reinstall individual applications and device drivers if they are corrupted or accidentally erased. Reinstalling an individual device driver or software title may correct a problem you are experiencing with your computer, and you may not need to recover the entire contents of your hard drive. If you do need to reinstall all the software titles that shipped with your computer, use the System Recovery CD. See “Using the System Recovery CD(s)” on page 66.



You must be in Windows to run the Application Recovery CDs. The application will not run from DOS. If you have any questions on using the Application Recovery CDs, contact Sony Customer Support.

Some applications on the Application Recovery CDs must be decompressed before the installation process begins. Your screen does not change while the files are decompressed. The time to decompress an application varies and may be as long as 30 minutes.

To use the Application Recovery CD(s)

- 1 Turn on your computer. If your computer is already on, close all applications.
- 2 When the Windows desktop appears, insert the first Sony Application Recovery CD in the CD-ROM drive. The Application Recovery utility loads automatically.
- 3 When the Application Recovery menu appears, follow the on-screen instructions to complete the recovery process.

Your system may include one or two Application Recovery CDs. If you have two Application Recovery CDs, insert the first CD to run the Application Recovery program. You may be prompted to insert the second CD, depending on the application you wish to restore.

Hard Drive Partition

In order to improve the performance of your computer's DVgate™ Motion software, the hard disk drive on your computer has been formatted with two partitions, C and D. DVgate Motion saves files to the D partition. This prevents large video captures from consuming the available space on your C partition. To maintain optimum performance of DVgate Motion, you should defragment your D partition regularly. See the DVgate Motion online help for more information.

About the Software on Your Computer

Your VAIO Z505 SuperSlim Pro notebook is ready to help you work, play, learn, and communicate as soon as you turn it on. This section gives you an overview of the activities you can perform with your software titles. For support information, see “For Answers to Your Software Questions” on page 77.

Adobe Acrobat® Reader

Adobe Systems Inc.

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

Adobe PhotoDeluxe® Business Edition

Adobe Systems Inc.

Create amazing photo effects with Adobe PhotoDeluxe. Without learning complex software, you can enhance, restore, and be creative with your photos. Includes built-in guided activities, stock photos, clip art and templates to assist you.

America Online®

America Online

America Online is a popular Internet online service. Stay in touch with family and friends with Easy-to-Use E-mail, manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

AT&T WorldNet® Service

AT&T

Fast, reliable Internet access from AT&T WorldNet Service. AT&T WorldNet Service provides web-based e-mail, a personalized start page from Excite, easy access to the Excite search engine, free web pages, online and live agent technical support, instant messaging, and special shopping discounts at Market Square.

CompuServe® 2000*CompuServe, Inc.*

The all new CompuServe 2000 delivers a powerful tool for Internet users who want serious and timely information, in-depth research, and professional communities backed by state-of-the-art technologies, including high-speed access and powerful e-mail messaging.

DVgate™ Motion*Sony Electronics*

Connect a digital video camera recorder to the i.LINK connector and capture your own video clips. You can edit the clips from your video, add others, and combine clips into new movie segments.

DVgate™ Still*Sony Electronics*

Connect a digital video camera recorder to the i.LINK connector and capture your own still images. You can save your images in a variety of popular file formats.

EarthLink TotalAccess™*EarthLink Network, Inc.*

An Internet Service Provider that supplies access, information, and assistance to its customers, introducing them to the Internet. Member benefits include e-mail, a Personal Start Page, a free 6 MB web site, a member newsletter, and 24-hour technical support.

eMail inChorus™*Softlink, Inc.*

This communications tool turns your e-mail into multimedia e-mail. With eMail inChorus™, in minutes you can send your colleagues and friends presentations and e-mails narrated with your pre-recorded voice and illustrated with graphics and animated annotation.

McAfee VirusScan®*Network Associates, Inc.*

Protect your computer from viruses. VirusScan can detect viruses from floppy disks, Internet downloads, e-mail attachments, intranets, shared files, CD-ROMs, and online services.

Media Bar™*Sony Electronics*

Media Bar software is your all-in-one solution for audio/video playback. Media Bar software handles all common computer multimedia formats and controls selected Sony devices. In addition to audio/video library cataloging and playlist management, Media Bar software includes digital video quality control and effects features. Media Bar software seamlessly integrates a variety of new media formats with an easy-to-use software interface.

Microsoft® Internet Explorer for Windows® 98*Microsoft Corporation*

Internet Explorer delivers the web the way you want it. It is safe, easy to use, and you can personalize how you access the web. Outlook Express and other tools in Internet Explorer also help you have a great experience when you are on the web.

Microsoft® Money 99*Microsoft Corporation*

Microsoft Money 99 is personal finance software that lets you perform your financial tasks, everything from paying bills to planning for the future, in a smarter, faster way. With Money's online services, you can pay bills and bank from the comfort of home.

Microsoft® Outlook® 98*Microsoft Corporation*

Outlook 98 is Microsoft's premier messaging and collaboration client. It combines the leading support for Internet standards-based messaging systems with integrated calendar, contact, and task-management features.

Microsoft® Word*Microsoft Corporation*

The world's leading word processor, allows you to create professional-looking letters, school reports, and other documents using ready-to-use templates, automatic formatting, and spelling and grammar checkers.

Microsoft® Works Suite 99*Microsoft Corporation*

Microsoft Works Suite 99 is an integrated program for creating spreadsheets, databases, calendars, and more. The Works Calendar reminds you of important dates.

MindSpring Internet Desktop*MindSpring Enterprises, Inc.*

The MindSpring Internet Desktop offers you access to different areas of the Internet from one convenient program. With a single click on the MindSpring Internet Desktop, you can easily search the Internet, send and receive e-mail, access news and weather, and more.

Netscape Communicator™*Netscape Communications*

Netscape Communicator is an all-in-one Internet tool that makes it easy to browse the web, send Internet e-mail, chat, read newsgroups and compose great web documents.

PictureGear™*Sony Electronics*

This image management software displays images from your hard drive, a Sony Digital Still Camera, or a Sony Mavica® Camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder.

Prodigy Internet™*Prodigy Communications Corporation*

An online service that helps you find what you need online faster and smarter. Prodigy delivers powerful online content such as sports scores, stock quotes, news, and easy access to Excite, plus quality customer service, all at a competitive price.

Quicken® Basic 99*Intuit, Inc.*

Quicken is a fast, easy way to organize your finances. Quicken works just like your checkbook, so it is easy to learn and use. Quicken manages all your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

Smart Capture*Sony Electronics*

Smart Capture is a fun new way to send multimedia messages via e-mail. Smart Capture manages the i.LINK connection between your computer and a Sony Digital Handycam® camcorder that supports the i.LINK interface. It allows you to capture compressed video or still images that you can save or share via e-mail. A smart solution to computer, digital audio/video and network convergence.

Smart Connect*Sony Electronics*

Smart Connect allows you to use an i.LINK cable (not supplied) to connect your VAIO computer to another VAIO computer that supports Smart Connect. You can then use one computer to copy, delete, and edit files on the other computer. You can also print from a printer attached to either computer.

Smart Label*Sony Electronics*

This tool allows you to record your voice and play it back at any time to remind you of important information, such as telephone numbers or appointments. It can also be used as a normal text memo pad. It can record a voice memo up to 60 seconds long. You can combine this with pictures and/or text to create a memo that you can place on your computer desktop.

Smart Pad*Sony Electronics*

Smart Pad enables you to record handwritten information such as text, symbols, simple maps, and drawings. You can use the plastic pen that came with your computer to enter information on the touch pad.

Smart Publisher*Sony Electronics*

Smart Publisher makes it easy for you to send web pages to the Internet using e-mail or FTP.

Smart Write*Sony Electronics*

A word processor that allows you to create documents that incorporate pictures and sound. With Smart Write, you can record your voice right into the page and draw directly onto your documents with a computer “pencil.”

WinFax® Basic Edition*Symantec Corporation*

WinFax Basic software incorporates an easy-to-use interface that allows you to send and receive faxes easily. Upgrade to WinFax Pro to receive additional features.

About Your Recovery CDs

Application Recovery CD(s)

Sony Electronics

This program allows you to reinstall individual applications and device drivers. Use it to restore corrupted or accidentally erased files.

System Recovery CD(s)

Sony Electronics

This program allows you to restore the software titles that shipped with your computer if they become corrupted or are erased accidentally. It can be used only to restore the hard disk of the Sony computer you purchased.

For Answers to Your Software Questions

Acrobat® Reader, Adobe PhotoDeluxe® Business Edition (Adobe Systems Incorporated)

website	http://www.adobe.com/
phone	206-628-2746 (fee-based support)
fax	206-628-5737
e-mail	techdocs@adobe.com
hours	M-F, 6 AM-5 PM PT

America Online® (America Online)

website	http://www.aol.com/
phone	800-827-3338
hours	7 days a week, 24 hours a day

AT&T WorldNet® Service (AT&T)

website	http://www.worldnet.att.net
phone	800-400-1447
e-mail	worldnet@attmail.com
hours	7 days a week, 24 hours a day

CompuServe® 2000 (CompuServe, Inc.)

website	http://www.compuserve.com/
phone	800-848-8990

EarthLink Network TotalAccess™ (EarthLink Network, Inc.)

website	http://help.earthlink.net/techsupport/
phone	800-395-8410
e-mail	support@earthlink.net
hours	7 days a week, 24 hours a day

eMail inChorus™ (Softlink, Inc.)

website	http://www.sonk.com
phone	408-970-3370
e-mail	support@sonk.com

GTE® (GTE Corporation)

phone	800-927-3000
hours	7 days a week, 24 hours a day

McAfee VirusScan (Network Associates, Inc.)

website	http://support.mcafee.com
phone	408-988-3832
e-mail	cybr@nai.com
hours	M-F 9AM-5PM Central Time

Netscape Communicator™ (Netscape Communications Corporation)

website	http://www.netscape.com/
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4SONY PC is free of charge for 90 days after the original date of purchase.

Prodigy Internet™ (Prodigy Communications Corporation)

website	http://www.prodigy.com/
phone	800-213-0992
hours	7 AM - 3 AM ET

Quicken® Basic (Intuit Inc.)

website	http://www.intuit.com/support
phone	900-555-4688
hours	7 days a week, 24 hours a day

Windows 98 Operating System, Works, Money, Outlook, Internet Explorer (Microsoft Corporation)

website	http://www.microsoft.com/support/
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4SONY PC is free of charge for 90 days after the original date of purchase.

WinFax® Basic Edition (Symantec Corporation)

website	http://www.symantec.com/techsupp/
phone	800-798-0850
fax	800-554-4403 in North America 541-984-2490 outside North America

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972).

Specifications

Model	PCG-Z505R	PCG-Z505RX
Processor	366 MHz* Pentium II	400 MHz* Pentium II
Hard Disk Drive	6.4 GB [†]	8.1 GB [†]
Standard RAM	64 MB SDRAM, expandable to 192 MB	128 MB SDRAM, [‡] expandable to 192 MB**
LCD Screen	12.1" XGA TFT	
L2 Cache Memory	256 KB (on CPU)	256 KB (on CPU)
MPEG	MPEG1 Digital Video supports full-screen playback	
Graphics	128-bit accelerator with 2.5 MB Video RAM	
Sound Capabilities	16-bit CD-quality stereo sound	
Diskette Drive	External USB 3.5" 1.44 MB	
Modem	K56flex™ and V.90 compatible modem ^{††}	
Infrared	Supports 4 mbps, 1.1 mbps, and 115 kbps IrDA Standard	
Expansion Capabilities	One PCMCIA type II Card Card bus support	
Built-in Capabilities	Microphone Stereo speaker Touchpad	
Telecommunication Capabilities	Data/fax send/receive	
Connection Capabilities on Z505 SuperSlim Pro	Phone line (RJ-11) i.LINK port replicator i.LINK (IEEE-1394) 2 USB ports, including 1 mini-USB port 10Base-T/100Base-T Ethernet interface Microphone In DC In Headphone	
Connection Capabilities on i.LINK Port Replicator	i.LINK Printer Serial USB VGA monitor	
Supplied Accessories	USB floppy disk drive Mini-USB converter cable Rechargeable battery AC adapter and power cord i.LINK port replicator Phone cable RJ-45 network cable adapter	
Service	90-day limited express service ^{††} Extendible to one year from original date of purchase upon registration	

<i>Model</i>	<i>PCG-Z505R</i>	<i>PCG-Z505RX</i>
<i>Limited Warranty</i>	90-day parts/labor standard ^{††} Extendible to one year from original date of purchase upon registration	
<i>Power Requirements</i>	45 watts maximum (19.5V DC/AC100-240V)	
<i>Power Management</i>	Energy Star Compliant Advanced Configuration and Power Interface (ACPI)	
<i>Battery</i>	Lithium-ion	
<i>Dimensions</i>	10.8" (w) x 0.87" (h) x 8.9" (d) (275mm x 22.0mm x 226mm) ^{***}	
<i>Weight</i>	3.5 lbs. (1.58 kg) (with supplied battery)	
<i>Operating Temperature</i>	41° F to 95° F (5° C to 35° C) (temperature gradient less than 18° F (10° C)/hour)	
<i>Operating Humidity</i>	20% to 80% (not condensed), provided that humidity is less than 65% at 95° F (35° C) (hygrometer reading of less than 84° F (29° C))	
<i>Storage Temperature</i>	-4° F to 140° F (-20° C to 60° C) (temperature gradient less than 18° F (10° C)/hour)	
<i>Storage Humidity</i>	10% to 90% (not condensed) provided that humidity is less than 20% at 140° F (60° C) (hygrometer reading of less than 95° F (35° C))	

* MHz denotes microprocessor internal clock speed; other factors may affect application performance.

† GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary.

‡ Your system may contain additional memory installed at the time of purchase.

** The PCG-Z505R includes 64 MB on-board memory. The PCG-Z505RX includes 64 MB on-board memory and a 64 MB memory module. When you expand the PCG-Z505RX memory to 192 MB, the supplied 64 MB memory module can no longer be used in the PCG-Z505RX.

†† Maximum speed for faxing is 14.4 kbps. Your modem is capable of downloading at 56 kbps using K56flex Technology or V.90. Your online service or Internet Service Provider, however, may not support this technology or operate at this speed. .

‡‡ Certain restrictions apply.

*** Height measured at the thinnest point. Height at the thickest point is 1.05" (26.8mm).

Specifications are subject to change without notice.

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CHAPTER 5.

EXPLODED VIEWS AND PARTS LIST

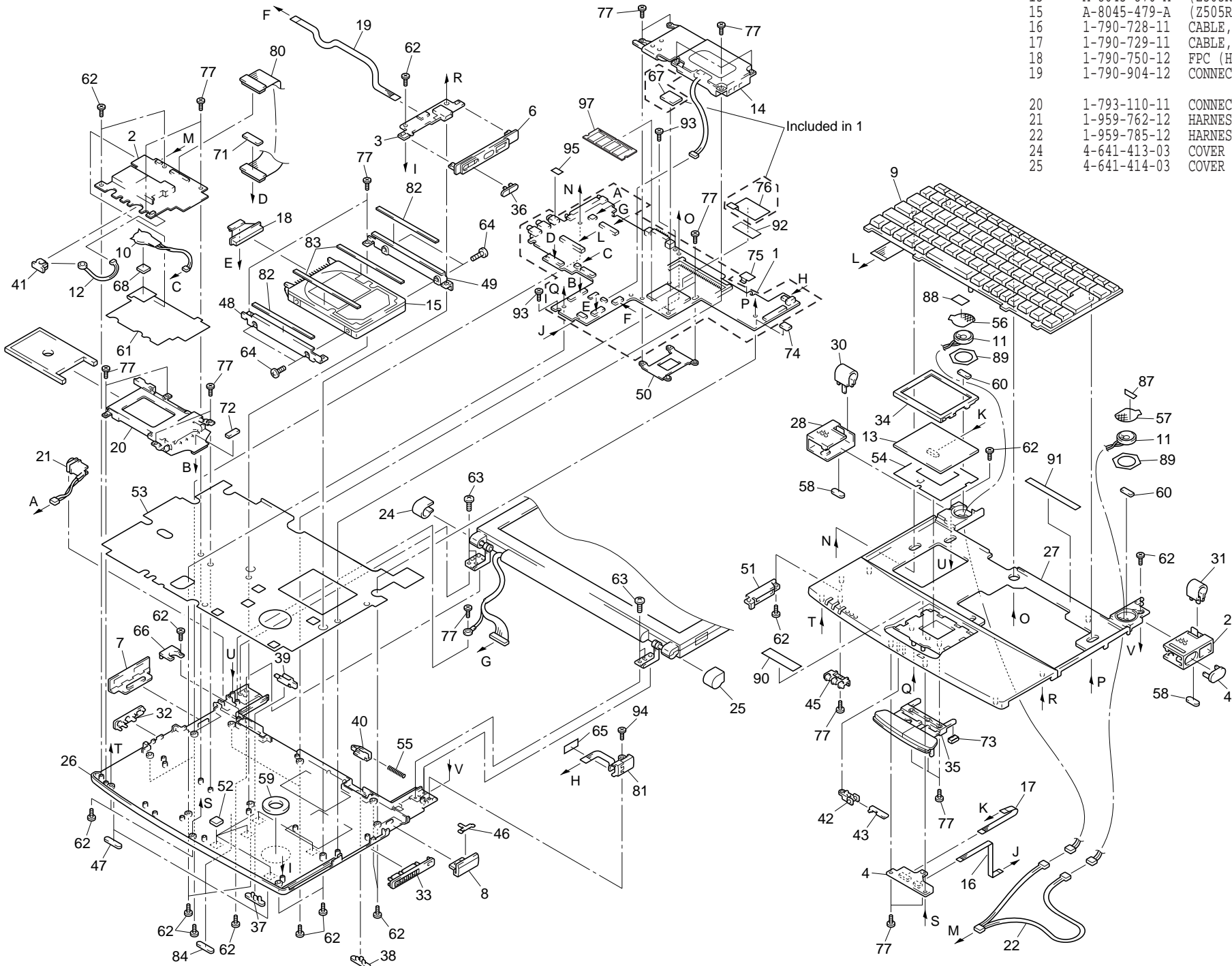
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

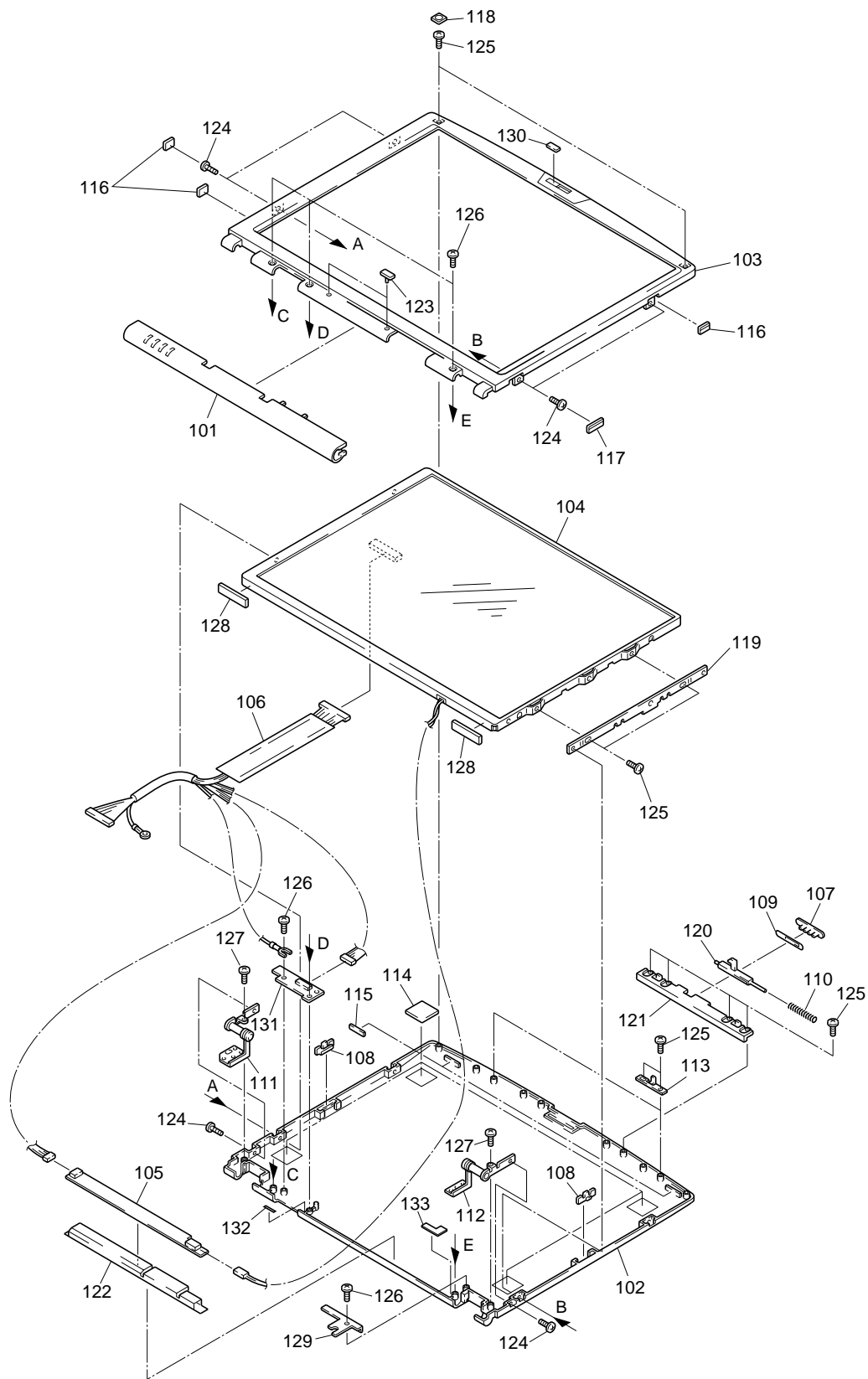
5-1. Main Section



Ref.No.	Part No.	Description
1	A-8045-858-A	(Z505RX)...C/P MBX-31 (400U) ASSY (S)
1	A-8045-859-A	(Z505R)...C/P MBX-31 (366U) ASSY (S)
2	A-8045-852-A	C/P IFX-87 ASSY (S)
3	A-8045-853-A	C/P SWX-42 ASSY (S)
4	A-8045-854-A	C/P SWX-43 ASSY (S)
6	X-4622-155-3	ESCUTCHEON (POWER) ASSY
7	X-4622-156-1	LID (PR) ASSY
8	X-4622-318-1	LID (KE) (2) ASSY
9	1-418-399-21	KEYBOARD UNIT
10	1-528-984-11	BATTERY, V/L RECHARGEABL
11	1-529-362-11	SPEAKER, (2.0CM)
12	1-542-392-11	MICROPHONE UNIT
13	1-759-708-21	PAD, TOUCH
14	1-763-342-11	DC FAN
15	A-8045-870-A	(Z505RX)...HDD 8G ASSY (S)
15	A-8045-479-A	(Z505R)...HDD 6.4 GB (S)
16	1-790-728-11	CABLE, FLEXIBLE FLAT (8 CORE)
17	1-790-729-11	CABLE, FLEXIBLE FLAT (12 CORE)
18	1-790-750-12	FPC (HDD)
19	1-790-904-12	CONNECTION, SWITCH FPC
20	1-793-110-11	CONNECTOR, PC CARD
21	1-959-762-12	HARNESS (DC JACK)
22	1-959-785-12	HARNESS (SPEAKER RELAY)
24	4-641-413-03	COVER (DL)
25	4-641-414-03	COVER (DR)
26	4-643-290-01	HOUSING (BOTTOM)
27	4-643-291-01	HOUSING (PALM REST)
28	4-641-421-02	COVER (BBL)
29	4-641-422-02	COVER (BBR)
30	4-641-423-03	COVER (BPL)
31	4-641-424-03	COVER (BPR)
32	4-641-431-02	ESCUTCHEON (AU)
33	4-641-433-02	ESCUTCHEON (F)
34	4-641-434-02	ESCUTCHEON (PAD)
35	4-641-435-03	BUTTON (PAD)
36	4-641-437-01	KNOB (POWER)
37	4-641-438-01	KNOB (BL)
38	4-641-439-01	KNOB (BR)
39	4-641-440-02	HOLDER (BL)
40	4-641-441-01	HOLDER (BR)
41	4-641-443-04	HOLDER (MIC)
42	4-641-444-01	HOLDER (SW)
43	4-641-445-01	PLATE (SW)
44	4-641-446-01	WINDOW
45	4-641-447-01	LENS (F)
46	4-641-448-01	LENS (KE)
47	4-641-449-01	FOOT (F)
* 48	4-641-461-11	(Z505RX)...BRACKET (HDDF)
* 48	4-641-461-02	(Z505R)...BRACKET (HDDF)
* 49	4-641-462-11	(Z505RX)...BRACKET (HDDR)
* 49	4-641-462-02	(Z505R)...BRACKET (HDDR)
* 50	4-641-463-01	BRACKET (CPU)
51	X-4622-424-1	ESCUTCHEON (MS) ASSY
52	4-641-467-11	(Z505RX)...CUSHION (HDD) (S)
52	4-641-467-01	(Z505R)...CUSHION (HDD) (S)
* 53	4-644-166-11	(Z505RX)...INSULATING SHEET (BOTTOM)
* 53	4-644-166-01	(Z505R)...INSULATING SHEET (BOTTOM)
* 54	4-641-469-01	INSULATING SHEET (PAD)
55	4-641-779-01	SPRING (BT), COMPRESSION COIL
56	4-641-780-02	COVER (SPL)
57	4-641-781-02	COVER (SPR)
58	4-641-782-01	FOOT (R)
59	4-641-837-11	(Z505RX)...CUSHION (HDD) (C)
59	4-641-837-01	(Z505R)...CUSHION (HDD) (C)
60	4-641-838-01	CUSHION (SP)
61	4-641-839-03	INSULATING SHEET (M)
62	4-644-492-11	ACE (M2), LOCK
63	7-621-773-86	SCREW +B 2.6X4
64	7-682-145-01	SCREW +P 3X4
65	4-635-952-01	INSULATING SHEET (WJ)
66	4-641-442-01	HOLDER (WIRE)
67	4-641-471-02	SHEET, THERMAL
68	4-642-126-01	CUSHION (BB)
71	4-642-129-01	CUSHION (FPC)
72	4-642-443-01	CUSHION (T3)
73	4-642-444-01	CUSHION (T4)
74	4-642-447-01	GASKET (USB)
75	4-642-448-01	SHEET (SPR), INSULATING
76	4-642-449-01	SHEET (MZ)
77	4-641-876-01	SCREW (M2X3.5)
80	1-790-751-12	FPC (CNX-72)
81	1-790-699-12	FPC (CNX-73)
82	4-642-643-01	CUSHION (BRACKET)
83	4-642-685-02	(Z505R)...CUSHION (HBB)
84	4-635-946-11	FOOT
87	4-642-970-01	SHEET (SP (R)), CONDUCTIVE
88	4-642-971-01	SHEET (SP (L)), CONDUCTIVE
89	4-642-974-01	CUSHION (B (SP))
90	4-643-107-01	TAPE (PAD)
91	4-644-513-01	WOVEN (KB), FABRIC NON
92	4-642-446-02	TAPE (SPR)
93	4-643-089-01	SCREW (M2X3)
94	4-643-356-01	SCREW (M2X5)
95	4-644-083-01	GASKET (IL)
97	8-759-588-74	(Z505RX)...IC MB8508S064CF-100LDG

Ref.No.	Part No.	Description
26	4-643-290-01	HOUSING (BOTTOM)
27	4-643-291-01	HOUSING (PALM REST)
28	4-641-421-02	COVER (BBL)
29	4-641-422-02	COVER (BBR)
30	4-641-423-03	COVER (BPL)
31	4-641-424-03	COVER (BPR)
32	4-641-431-02	ESCUTCHEON (AU)
33	4-641-433-02	ESCUTCHEON (F)
34	4-641-434-02	ESCUTCHEON (PAD)
35	4-641-435-03	BUTTON (PAD)
36	4-641-437-01	KNOB (POWER)
37	4-641-438-01	KNOB (BL)
38	4-641-439-01	KNOB (BR)
39	4-641-440-02	HOLDER (BL)
40	4-641-441-01	HOLDER (BR)
41	4-641-443-04	HOLDER (MIC)
42	4-641-444-01	HOLDER (SW)
43	4-641-445-01	PLATE (SW)
44	4-641-446-01	WINDOW
45	4-641-447-01	LENS (F)
46	4-641-448-01	LENS (KE)
47	4-641-449-01	FOOT (F)
* 48	4-641-461-11	(Z505RX)...BRACKET (HDDF)
* 48	4-641-461-02	(Z505R)...BRACKET (HDDF)
* 49	4-641-462-11	(Z505RX)...BRACKET (HDDR)
* 49	4-641-462-02	(Z505R)...BRACKET (HDDR)
* 50	4-641-463-01	BRACKET (CPU)
51	X-4622-424-1	ESCUTCHEON (MS) ASSY
52	4-641-467-11	(Z505RX)...CUSHION (HDD) (S)
52	4-641-467-01	(Z505R)...CUSHION (HDD) (S)
* 53	4-644-166-11	(Z505RX)...INSULATING SHEET (BOTTOM)
* 53	4-644-166-01	(Z505R)...INSULATING SHEET (BOTTOM)
* 54	4-641-469-01	INSULATING SHEET (PAD)
55	4-641-779-01	SPRING (BT), COMPRESSION COIL
56	4-641-780-02	COVER (SPL)
57	4-641-781-02	COVER (SPR)
58	4-641-782-01	FOOT (R)
59	4-641-837-11	(Z505RX)...CUSHION (HDD) (C)
59	4-641-837-01	(Z505R)...CUSHION (HDD) (C)
60	4-641-838-01	CUSHION (SP)
61	4-641-839-03	INSULATING SHEET (M)
62	4-644-492-11	ACE (M2), LOCK
63	7-621-773-86	SCREW +B 2.6X4
64	7-682-145-01	SCREW +P 3X4
65	4-635-952-01	INSULATING SHEET (WJ)
66	4-641-442-01	HOLDER (WIRE)
67	4-641-471-02	SHEET, THERMAL
68	4-642-126-01	CUSHION (BB)
71	4-642-129-01	CUSHION (FPC)
72	4-642-443-01	CUSHION (T3)
73	4-642-444-01	CUSHION (T4)
74	4-642-447-01	GASKET (USB)
75	4-642-448-01	SHEET (SPR), INSULATING
76	4-642-449-01	SHEET (MZ)
77	4-641-876-01	SCREW (M2X3.5)
80	1-790-751-12	FPC (CNX-72)
81	1-790-699-12	FPC (CNX-73)
82	4-642-643-01	CUSHION (BRACKET)
83	4-642-685-02	(Z505R)...CUSHION (HBB)
84	4-635-946-11	FOOT
87	4-642-970-01	SHEET (SP (R)), CONDUCTIVE
88	4-642-971-01	SHEET (SP (L)), CONDUCTIVE
89	4-642-974-01	CUSHION (B (SP))
90	4-643-107-01	TAPE (PAD)
91	4-644-513-01	WOVEN (KB), FABRIC NON
92	4-642-446-02	TAPE (SPR)
93	4-643-089-01	SCREW (M2X3)
94	4-643-356-01	SCREW (M2X5)
95	4-644-083-01	GASKET (IL)
97	8-759-588-74	(Z505RX)...IC MB8508S064CF-100LDG

5-2. LCD Section



Ref.No.	Part No.	Description
101	X-4622-146-2	COVER (DC) ASSY
102	X-4622-360-1	HOUSING (DISPLAY) ASSY
103	X-4622-361-1	HOUSING (BEZEL) ASSY
104	A-8045-480-A	LCD UNIT (12.1 TFT XGA) (S)
105	1-418-398-12	INVERTER UNIT
106	1-959-716-12	HARNESS, LCD (31 PIN)
107	4-639-580-01	KNOB (LATCH)
108	4-639-588-01	LOCK (D)
109	4-639-622-01	SPACER (LATCH)
110	4-639-623-01	SPRING (LATCH), COIL
111	4-641-415-01	TILT UNIT (L)
112	4-641-416-01	TILT UNIT (R)
113	4-641-452-01	LOCK (T)
114	4-641-453-02	CUSHION (LCD)
115	4-641-454-02	CUSHION (T)
116	4-641-455-01	BLIND (A), HOLE
117	4-641-456-01	BLIND (B), HOLE
118	4-641-457-01	BLIND (C), HOLE
* 119	4-641-458-01	BRACKET (LCD)
120	4-641-459-01	LEVER LATCH
121	4-641-460-02	HOLDER LATCH
122	4-641-738-02	INSULATOR (IVT)
123	4-641-828-02	CUSHION (DC)
124	7-621-771-06	SCREW +B 2X5
125	7-621-772-00	SCREW +B 2X3
126	7-621-772-18	SCREW +B 2X4
127	7-621-773-86	SCREW +B 2.6X4
128	4-642-146-02	CUSHION (U)
129	4-642-147-01	CLAMP (DR)
130	4-639-778-02	CUSHION (LATCH)
131	A-8045-855-A	C/P LEX-19 ASSY (S)
132	4-642-975-01	SPACER (DISPLAY) (T=0.6)
133	4-645-190-01	SPACER (DC)

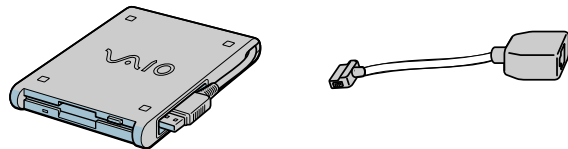
Ref.No.	Part No.	Description
		ACCESSORIES

	1-528-983-31	PACK, BATTERY (M BATTERY)
301	A-8046-288-A	FDD ASSY (S)
* 302	1-777-926-31	CORD, CONNECTION
	1-782-614-31	CORD, POWER
303	1-790-777-11	CABLE, USB CONVERSION
304	1-959-869-11	HARNESS, RJ45
△ 305	1-418-388-12	ADAPTOR, AC
	3-868-306-11	READ ME FIRST
	3-868-305-11	USER GUIDE

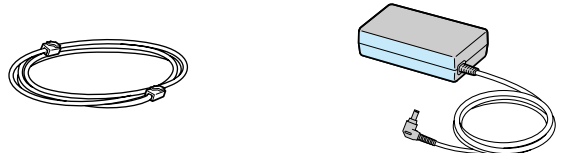
LOOK AT EXPLODED VIEWS

306	PCGA-UPR5
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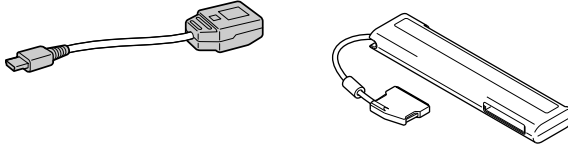
- 301
FDD drive
- 304
RJ45 harness



- 302
Connection cord
- 305
AC adapter



- 303
USB conversion cable
- 306
Port Replicator (PCGA-UPR5)



• The Port Replicator itself does not have the Part No. Refer to the Exploded Views of PCGA-UPR5 Service manual (9-872-020-11).

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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